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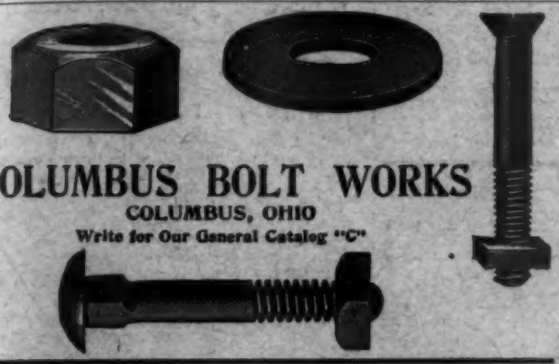
The American Artisan

THE HARDWARE RECORD

46.—No. 19. CHICAGO, NOVEMBER 7, 1903. $2.00 per Year.



COLUMBUS BOLT WORKS
COLUMBUS, OHIO
Write for Our General Catalog "C"

URE ASPHALT ROOFING
Never Dries Out or Cracks Our Tarred Ready Roofing, Slaters' Felt, Building Paper, Roofing Cements, Paints, Etc
WRITE US FOR PRICES
L. PERKINS & CO. 235 Lake St. CHICAGO

Never Will Leak . . .

American Seal Elastic Oil Cement will not get hard—always stays elastic.

Stops leaks in any roof—old or new, and will wear for years. Fix up the roof now and stop the leakage—in money and roof.

Use it on new work for jointing and 'round your skylights—follow it with a coat of American Seal Roof Paint—the best made—and the top of your house is safe for years. *Prices for the asking.*

THE WM. CONNORS PAINT MFG. CO.
TROY, NEW YORK
WESTERN AGENTS Dept. A. { J. L. Perkins & Co., 235 Lake St., Chicago. Stockhoff Supply Co., 107 N. Main St., St. Louis.

THIS SPACE FOR SALE
Inquire of Owner
Daniel Stern, 69 Dearborn St.
CHICAGO.

TINNERS FIND EMPLOYMENT
By advertising and using THE POWERS AUTOMATIC CHIMNEY TOPS
They make chimneys draw, give tinners employment making stocks, and give the dealers profit.
CORE MAKING
ADJUSTING BRIDGE
Sold by Hardware Jobbers and Dealers.
Made only by POWERS BROS. STREATOR, ILL.
This cut free to dealers.

OSGOOD'S
1903-4 CATALOGUE
just out, is a trade-maker and a trade-winner. You show a man our catalogue; he will forget some things and want an Osgood quick. Our Silent Salesman is a beautifully illustrated and artistic book, gotten up regardless of expense, to sell Osgood Scales. No live dealer can afford to be without one. With it and our discount sheet, you can capture the scale trade.
—WRITE—
OSGOOD SCALE CO.
BINGHAMTON, N. Y.

Atlas Bolt & Screw Co.
CLEVELAND, O.
Manufacturers of

Stove Bolts
Stove Rods
Stove Rivets
Mica Bolts
Fancy Nuts
Register Pins
Hinge Pins
and kindred articles for the
STOVE and RANGE
Manufacturing Trade

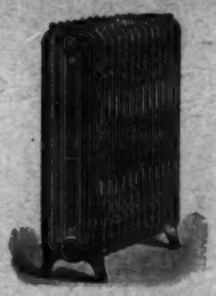
Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark,—you—know—what—you—are doing—but—nobody—else—does.

Black Diamond Files and Rasps
PERFECT—ALWAYS
TWELVE MEDALS AWARDED AT INTERNATIONAL EXPOSITIONS
TRADE MARK
G. & H. BARNETT CO.
Black Diamond File Works, PHILADELPHIA, PA.

NICHOLSON FILE CO.
GENERAL OFFICES: PROVIDENCE, R. I., U.S.A.
Manufacturers of

FILES AND RASPS
NICHOLSON ARCADE GREAT WESTERN EAGLE "X, F"
KEARNEY & FOOT AMERICAN McCLELLAN J. B. SMITH GOLD MEDAL

GENEVA TOOL CO. Hand Agricultural Tools Geneva, O.



Regardless of price the value of IDEAL Boilers and AMERICAN Radiators is absolutely superior—a full measure. Twelve Warehouses—Quick shipments.

AMERICAN RADIATOR COMPANY

LAKE AND DEARBORN STREETS, CHICAGO

SPERRY'S CALDRONS

Twelve sizes always in stock.

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

D. R. SPERRY & CO. Hollow-Ware Founders, BATAVIA, ILL.

To The Hardware Trade:

Our SPECIAL HIGH QUALITY SLIM TAPER FILES with extra sharp cutting edges that have been extensively sold throughout the West and Northwest by Woodrough & Hanchett Co. of Chicago (now out of business) is still one of our LEADERS, and all orders on this class of goods will be filled direct or through your jobber.

MAYER & COMPANY

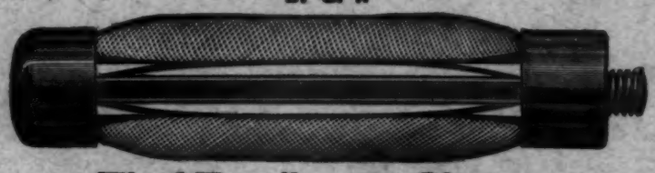
Manufacturers of

GOLD MEDAL FILES AND RASPS

NOT IN THE TRUST. BEST ON EARTH.

Philadelphia Pennsylvania

B. G. I.

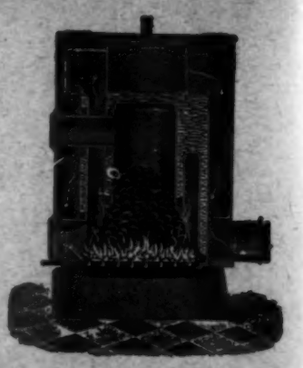


The Tomlinson' Cleaner

Is the most satisfactory means of thoroughly cleaning a shot gun ever invented. It will absolutely remove rust spots and keep a gun in perfect condition. Will fit any standard rod and any gun. The Tomlinson is cheap at $1.00 for it will last a lifetime with proper care. New wire sides furnished.

BRIDGEPORT GUN IMPLEMENT CO.

Agency 313 Broadway, New York City, N. Y. BRIDGEPORT, CONN.



"DEFENDER" STEEL BOILER

For Steam and Hot Water Heating Surface Burner. For Soft and Hard Coal. Portable and Brickset.

KEWANEE BOILER COMPANY, Kewanee, Ill.

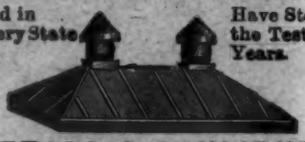
167 EAST LAKE STREET, CHICAGO

St. Louis Office: 518 Bank of Commerce Building

"THE ILLINOIS"

Sold in Every State

Have Stood the Test of Years.



METALLIC SKYLIGHTS

Made in 10 Styles and 500 Sizes

"THE ILLINOIS" are the best skylight made. We also manufacture Cornices, Finials, etc. Send for Handsome Illustrated Catalogue. Ribbed skylight glass furnished at very lowest prices.

J. H. JONES & SONS, Mfrs.

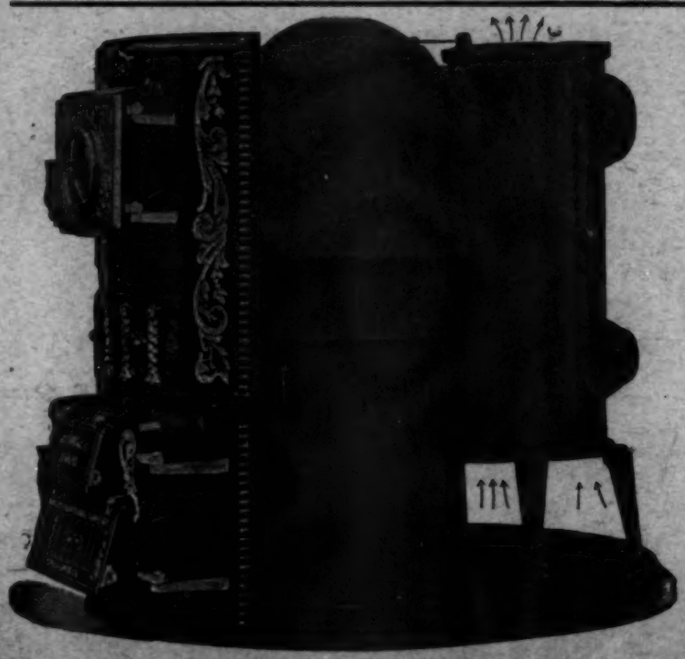
Lock Box 33. STREATOR, ILL.

"Concerning That Roof"

"The Clinching Argument" is an illustrated booklet that will interest anyone concerned in roofing materials. Shall we send it?

CORTRIGHT METAL ROOFING CO.

Philadelphia and Chicago.



The Crown "Low Down" Warm Air Furnace.

THE CROWN

"LOW DOWN"

FURNACE

COMPETES WITH STEAM AND HOT WATER HEATING.

1st—In heating at long distance.

2d—In an economical consumption of fuel.

Our Crown "Low Down" Furnace is Superior to Steam and Hot Water.

1st—In its simplicity of management, any ordinary help can manage this furnace.

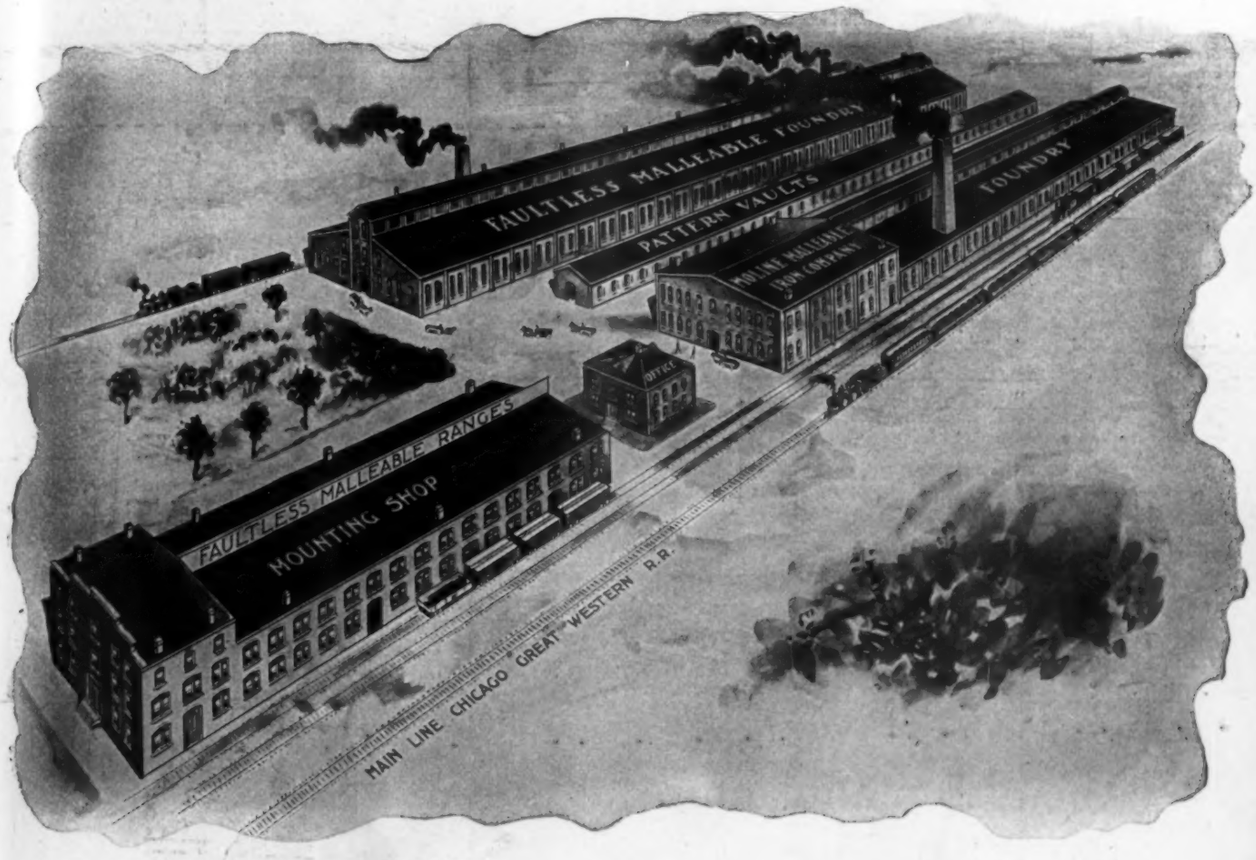
2d—In its economy of repairs, repairs being only needed at long intervals, the skilled mechanic not required to repair this furnace.

3d—Most important of all is the purity of air supplied. It's the ideal sanitary house heating construction. Any one caring for the good health and comfort of the home should not fail to examine this furnace before installing any other system of heating.

Ask For Our 1903 Furnace Book.

MARCH-BROWNBACK STOVE CO.

POTTSTOWN, PA.



To Merchants with Money.

Cash with Order: Whether you're rated at "two hundred thousand dollars with unlimited credit" or whether you're "one of them blank four fellows" makes no difference; your cash will fetch some prices on Malleable Steel Ranges that will cause you to wink with pleasure at the prospect of getting whatever Malleable Range trade there is floating 'round your brick-field!

Ever Stop to Figger why so many of your ought-to-be customers buy Ranges by Mail? Mebby they've found that cash-with-order means more than it seems. Why not give 'em a little turn for their money with some of your own coin?

Cash is King. Leastwise that's what the men say who pay cash. Write for particulars.

First Shipment made subject to dealer's inspection and approval.

The Faultless Manufacturing Company

NOW LOCATED IN ITS NEW MALLEABLE FOUNDRY AT SAINT CHARLES, ILLINOIS

Malleable St. Clair Steel Range

St. Clair Stoves and Ranges

THE GREAT FUEL SAVERS

We also manufacture the What Cheer Circulating Wood Heater.

Write for our 1903-4 Catalogue, showing our complete line.

Incandescent St. Clair Oak

Belleville Stove Works

Belleville, Illinois

GREAT WESTERN STOVE REPAIR CO., Minneapolis, Minn.
Agents for Minnesota, Wisconsin, Michigan, North Dakota and South Dakota

"Economy with efficiency is true economy."

CINDERELLA GAS HEATERS

These wonderful stoves use only one-half as much gas as others of the same size and type because they can only get one-half as much.

They are the equal of any in heating power—because they have more radiation and a longer fire travel.

Our stoves are the only goods equipped with radiators that are effective on all six sides.

When selecting a gas heater look at the size of the orifice for admitting the gas. This may be a small thing to look for, but it is a big thing to find. It shows what the maker thinks of his construction. Many of them put on two valves—We use but one, having a standard orifice.

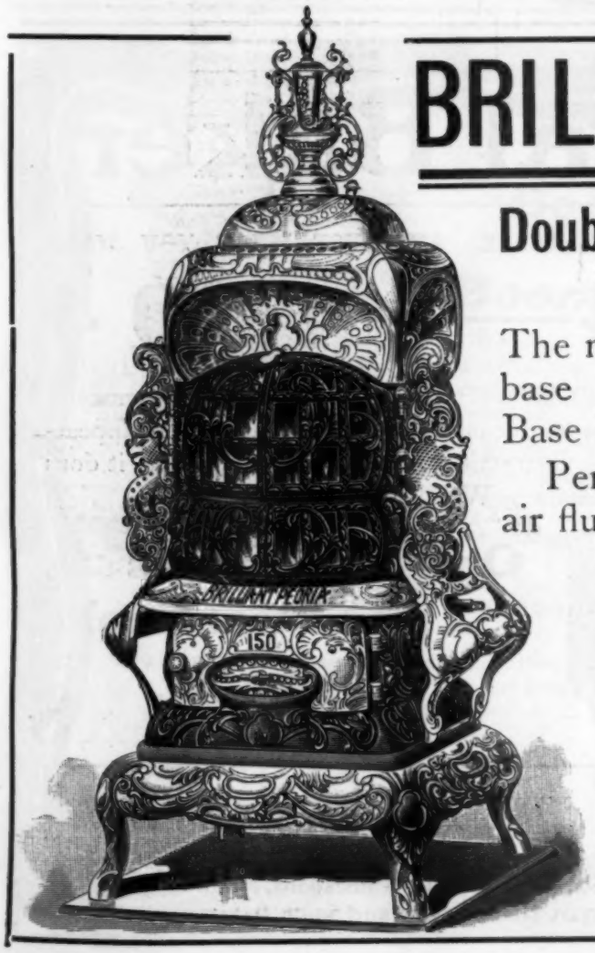
No others use so little gas.

Tell your trade about this stove—they will listen—for gas costs money—their money.

The Pittsburgh Stove & Range Co.

Pittsburgh - - Pa.

WESTERN AGENCY—W. D. SAGER, 38 to 40 Michigan St., Chicago, Ill. Get his prices and learn why he is busy.



BRILLIANT PEORIA

Double Heating Base Burner

FOR HARD COAL

The most economical; most powerful base heating and quick operating Base Burner on the market.

Perfect circulation of air. Our hot air flue construction, best on earth.

EVERY STOVE A DOUBLE HEATER.

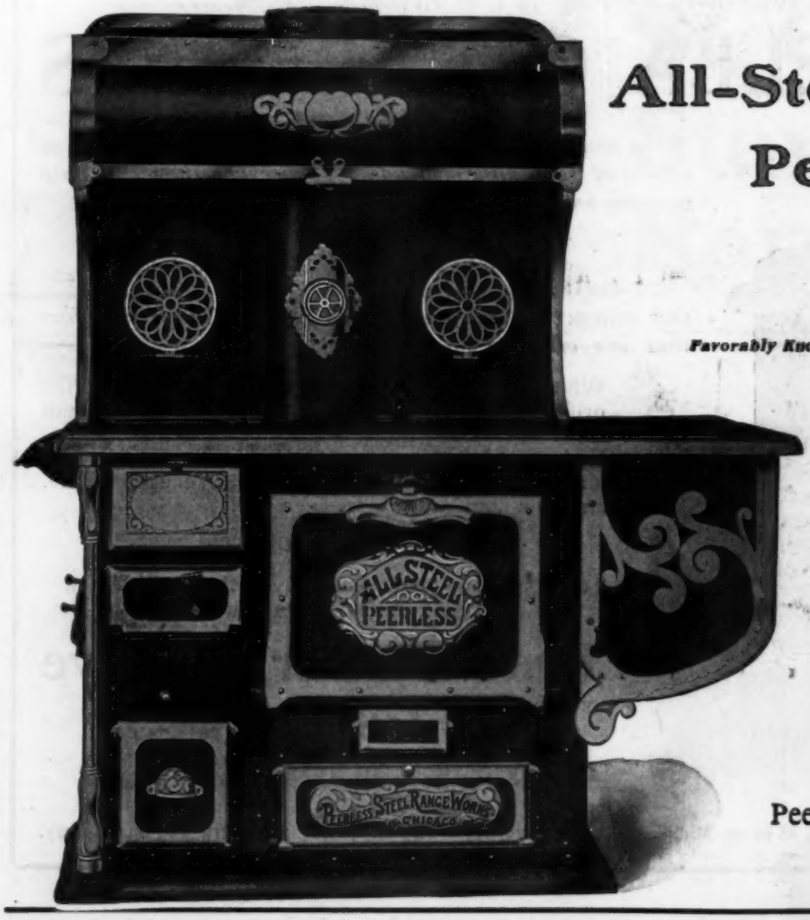
Write for full particulars. We can interest you.

Culter & Proctor Stove Co.

PEORIA, ILL.

Nos. 135, 150, 165

"A Good Record is the Best Guarantee for the Future"



All-Steel Peerless Ranges

Favorably Known for Over Nine Years

Malleable Steel Top Plates, (ground smooth and bright)
Malleable Doors and other fittings,
Steel-Asbestos-Steel Flue Bottom,
Massive Fire Box,
Steel Oven Shelf,
Extra Large Ovens,
Extra Large Reservoirs,
Pan for elevating wood fire,
Pouch feed and blue steel (without extra charge)

Catalogue Shows These and Other Good Features.

Peerless Steel Range Works

CHICAGO.

The Royal Baker

IS A NEW STEEL RANGE. IT'S JUST WHAT YOU WANT

4——1904

It is built on new lines—honest lines—graceful lines—substantial lines: It is artistic in appearance, attracting attention at once; and it does the work. We also make a full line of

Oaks, Hot Blasts and Steel Cooks

Write Us for Catalogue

THE ROYAL STOVE & RANGE CO., Greenville, Ohio

VAN'S

Patent Improved Wrought Steel Portable

RANGE

For Hotels, Restaurants, Public Institutions, Boarding Houses, and Private Families.

All Kinds of Hotel Implements for Culinary Purposes.

Manufactured and for Sale by

The John Van Range Co.

419 Elm and 410, 412, 414 and 416 Home Streets.

CINCINNATI - OHIO.

Boomer Furnace

REGARDING

Boomer Furnaces

OR

Boomer Steel Ranges

We want to state in strongest terms possible that if you want the

HEAVIEST,
MOST DURABLE,
MOST ECONOMICAL

and easiest to take care of Furnace or Steel Range buy a **BOOMER.**

Boomer Steel Range

Neither time nor money is spared to make them the Best.
Buy Boomers and save your coal bills.
We invite investigation.

THE HESS-SNYDER CO.,

Manufacturers MASSILLON, O.

Border Copyright '98

Large 10 oz. Can.

We Make It!

The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case From Your Jobber.

Nickel Plate Stove Polish Co.
CHICAGO.

The Champion Hot Water Combination Heaters

They Fit Any Furnace

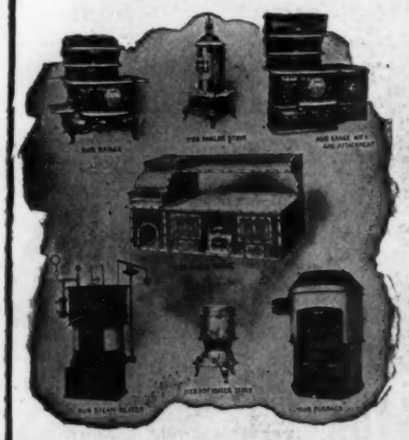
Base section when used without ring sections.

Ring section

These Heaters are made in five sizes diameter, and from 100 to 700 square feet radiation capacity.
Will heat those cold rooms or an addition to the building. Will increase the capacity of any furnace. Are cheaper than coils and will do more work.
Write for new circular. Manufactured by

FRANK D. STOLZ
156 Webster Ave., CHICAGO, ILL.

A few specimens of the extensive line of



HUB RANGES AND HEATERS

Manufactured and warranted by

SMITH & ANTHONY CO
BOSTON, MASS.

Send for descriptive circulars.

BURTON'S FUEL ECONOMIZER

Attached to a stove pipe **saves** more **fuel** and **radiates** more **heat** than any other stove pipe attachment

AN EASY SELLER.

Assertions Backed by Guarantee.

The W. J. BURTON CO., Detroit, Mich.

Money

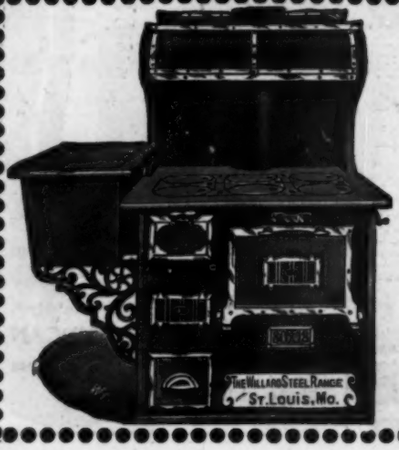
in retailing Steel Ranges is made not by handling something "just as good" as the "other fellow" has, but in putting in a line of goods that are a good deal better.

Champions

ALSO MARQUARTS

possess every feature of genuine merit known to modern steel range construction and have one feature found in no other range on the market in the shape of an additional flue, which is below the main heating flue, and conducts the air through the ash pit to the combustion chamber.

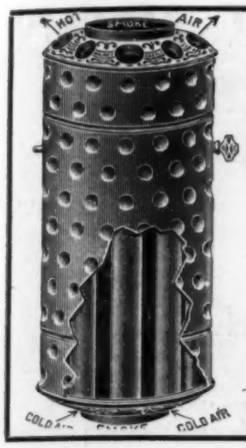
CHAMPION STEEL RANGE CO. CLEVELAND OHIO.



No Catalogue House

at present in existence can hold its steel range trade if the dealer lets the people of his vicinity know that he is handling the **Willard Steel Range,** giving highest grade quality at bed-rock prices.

Wm. G. Willard, Mfr.
619-621 N. Fourth Street, ST. LOUIS, MO.



TWICE THE HEAT--HALF THE COST

THE NEW ERA RADIATOR

Is the greatest heat producer and fuel saver ever placed on the market.

Every customer that has a house to heat will want one or more the moment you explain its merits.

Easiest thing in the world to install. Pays for itself in a short time.

You can't afford to miss this opportunity to add such a good seller to your stock.

Descriptive matter with your imprint for trade distribution—free.

WILMOT CASTLE CO. Elm Street, Rochester

4,866 sq. ins.

The Part that Does the Business.

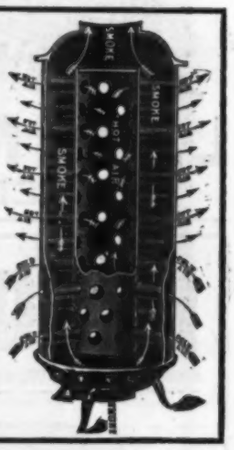
Sell The Radiator That Radiates

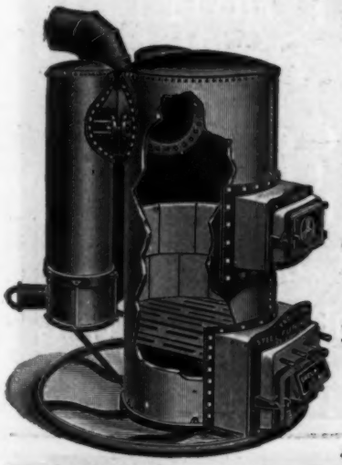
Take a common sense view of heating. If you wish to heat a poker you hold it OVER the fire, not at the SIDE.

We hold 96 to 120 pokers over the fire, each having a hollow air space in center, through which a current of air rapidly passes, sending the heat to all parts of the room, getting results which no DRUM or SIDE HEATER can give. Advertised in 82 family papers and magazines, bringing 18,000 inquiries about the Rochester Radiator. Those from YOUR town are referred to YOU while you carry our goods. Thus we sell them to you and then sell them FOR you. A postal will bring you full description and proofs from men in the trade who have sold thousands of them. Made in 12 styles and sell from $2.00 up. We will remember you with a Souvenir later, watch out for it. Address

ROCHESTER RADIATOR CO.

No. 120 Furnace St. ROCHESTER, N. Y.





A Solid Sheet of Steel

That's what our fire chamber is.

It beats them all in durability. Our use of vertical lines in the **Front Rank Furnaces** brings the air in direct contact with the entire heating surface.

These furnaces burn hard or soft coal or coke. We also make wood burning furnaces.

Send for our catalogue, it will give you a better idea of what we make.

FRONT RANK STEEL FURNACE CO.,

2301 to 2309 Lucas Ave., ST. LOUIS, MO.

MONCRIEF

WARM AIR FURNACE.

Specialties:
- All Cast Iron.
- Moncrief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity, Durability, Economy, Cleanliness in Use.

HENRY & SCHEIBLE CO.

6-8-10 Long St., Cleveland, O.

W. R. WILLIAMS,

ANTIOCH, ILL.,

WRITES:

"Please take out my want ad. in THE AMERICAN ARTISAN, the publication of which secured me a tinner the first issue. I have received many letters throughout this country. Am satisfied THE AMERICAN ARTISAN covers an enormous scope of territory."

THE MUELLER ALL CAST IRON DOUBLE RADIATOR FURNACE

Differs From All Others in Construction.

WE GUARANTEE it to contain from 10 to 100 per cent more direct HEATING SURFACE than any other heater of same diameter fire pot and casing.

BECAUSE of this greater heating surface and the construction of the furnace, it will heat more air with LESS COAL than any other.

NO TROUBLE to heat distant or exposed rooms.

THOUSANDS IN USE throughout the U. S. Over 1,000 progressive dealers selling them.

PROMPT SHIPMENTS.

WRITE FOR CATALOGUE AND PRICES.

L. J. MUELLER FURNACE CO.

191 REED ST. ESTABLISHED 1857 **MILWAUKEE, WIS.**

HERO FURNACES

Are best for cold climate

SMITH'S HOT WATER ATTACHMENTS

Can be used on any furnace

CHAS. SMITH CO.

CHICAGO, ILL.

CLARK'S CELEBRATED UNDER-FEED FURNACE.

Is the best heater on the market for burning the cheaper grades of slack and nut coal.

Every part of this furnace is made with great care, and is very strong and durable.

The feeding device is hung oscillating.
The radiator is on the top.
The entire furnace is cast iron.
It has but three joints.
It is a comparatively smokeless furnace.
The grate does not shake but revolves.

WRITE FOR CATALOGUE

W. A. CLARK & CO.

35 PIKE STREET :: :: :: COVINGTON, KY.

WEIR ALL STEEL GAS AND SOOT CONSUMING FURNACE.

THE HEAVIEST STEEL FURNACE MADE.

Absolutely Gas and Dust Tight. A Great Heat-Producer, but a Fuel Saver.

MANUFACTURED BY

THE MEYER FURNACE CO.

1300-1304 S. Washington St.,

Send for Catalogue. PEORIA, ILLS.

"The HANDY FURNACE PIPE"

Made with a View of Being Safe.

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

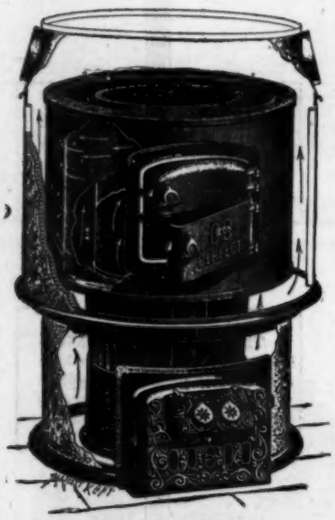
MANUFACTURED BY

F. MEYER & BRO. CO.

Send for Catalogue. PEORIA, ILLS.

Richardson & Boynton Co.'s

"PERFECT" FURNACES



COAL AND WOOD

Are Universally Known as First Class Goods.

SEND FOR CATALOGUES

Established 1837.

SOFT COAL.

84 LAKE ST., CHICAGO, ILL.

232-234 Water St., New York. 51 Portland St., Boston, Mass.

Emperor Furnaces

FOR WOOD.

Simple, Safe, Durable. Economical in Fuel.

The Best and Cheapest Line of Wood Furnaces . . . Furnished for either Brick or Galvanized Iron Casing.

SEND FOR CATALOGUE.

Bergstrom Bros. Co.

NEENAH, WIS.

THE SALE OF THE

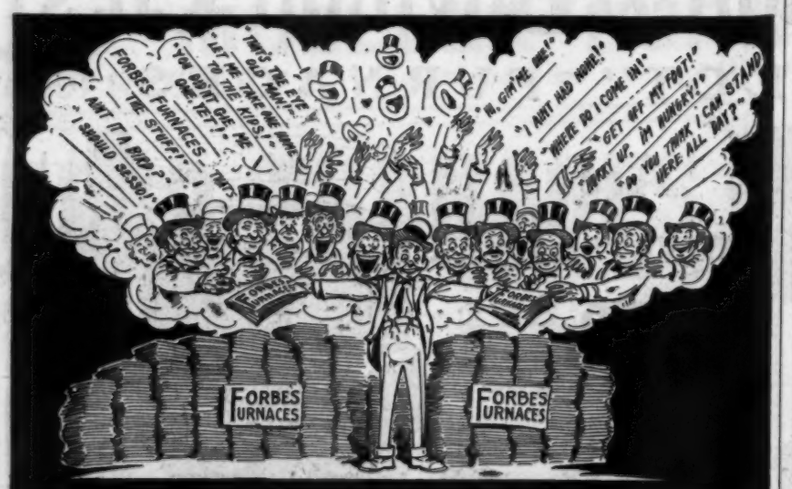
TORRID ZONE FURNACE

during the first three months of 1903 has exceeded that of any other year in the corresponding three months by about six to one. If you are not on our list, you had better look us up and you will see what this great advance in the demand means.

We are getting out a new Catalogue that has many things of interest in it for the dealer. They will be ready for mailing by the 20th of this month—free for the asking.

Lennox Manufacturing Co. Cor. Ninth Ave. and Frederick St., MARSHALLTOWN, IOWA.

FARWELL, OZMUN, KIRK & CO., St. Paul, Minn., Northwestern Distributors.



The Demand

for our catalogues is a heavy one, as the trade are realizing that the Forbes has marked improvements over any warm air heating furnace now in use. Let us send you a catalogue?

TUBULAR HEATING & VENTILATING CO., Philadelphia, Pa.

The man who does not advertise, says the Ashland, O., Gazette, simply because his grandfather did not, ought to wear knee breeches and a queue.

The man who does not advertise because it costs money should quit paying rent for the same reason.

The man who does not advertise because he tried it and failed, should throw away his cigar because the light went out.

The man who does not advertise because he doesn't know how himself, ought to stop eating because he can't cook.

The man who doesn't advertise because somebody said it did not pay, ought not to believe that the world is round because the ancients said it was flat.

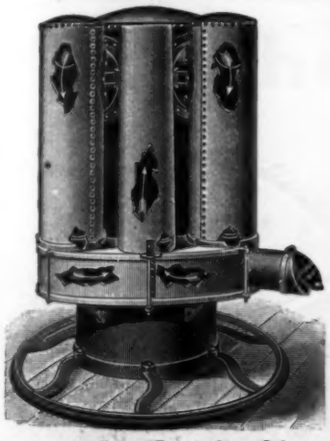
THE RECORD

of the

FLORAL CITY

Furnaces during the past ten years has never been equalled. They are, as a line, the best fitted and most powerful, economical and durable furnaces made, and we stand ready to prove this at any time by actual test. Perfect castings, skilful workmanship, careful supervision, these are the features that mark the superiority of the Floral City.

Monroe Foundry & Furnace Co.
MONROE, MICH.



A Furnace Recipe.

One Part, Good Material.
One Part, Good Design.
One Part, Good Workmanship.

This is the one we use in making the

AMERICAN FURNACE

Every furnace we make is guaranteed and our furnaces will bear comparison with any made. It is clean, durable and economical. A boiler-plate furnace, hence it don't crack.

The American Furnace Co.

Large Radiators, Easy to Clean Out. **1911-13 Pine Street, - ST. LOUIS. MO.** Burn Hard or Soft Coal or Coke. Large Doors.

Write for prices and secure the agency before the other fellow gets it.

HEIGHT OVER ALL 63 INCHES.

THE STANTON SEAMLESS WARM AIR HEATER

The Only Heater Made that is Proof Against the Leakage of Smoke and Gas Into the Warm Air Pipes.

Especially recommended for **Soft Coal** and **Soft Coal Slack.**
Perfect combustion.
We carry a large stock of registers, pipe and fittings.
Write for catalogue and secure territory.

THE STANTON HEATER CO.
MARTINS FERRY, OHIO

THE KELSEY

WARM AIR GENERATOR

THE STANDARD HIGH GRADE HEATER OF THE WORLD

Has greater heating surfaces than any other heater with same size grate. Warms air by the best method and forces it to distant or exposed rooms.

23,000 IN USE
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MAKERS
NEW YORK OFFICE 156 FIFTH AVE.
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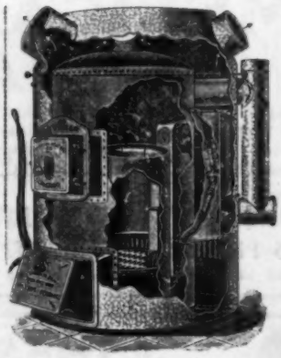
QUAKER WARM AIR AND COMBINATION HOT WATER HEATERS

Are the best because they contain more new points of excellence, more desirable features than any other Heater; because our entire production is made on the co-operative plan and in the best equipped factory in the country.



Catalogue will explain everything in detail and can be had for writing.

LIVE AGENTS WANTED to handle a line of fully warranted **Hot Water Heaters, Wall Registers and Furnace Regulators.**

QUAKER MFG. CO. Chicago Heights, Ill.

Royal Heaters.

MANUFACTURED BY THE

HART & CROUSE CO.

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ALL THE LEADING LINES OF

STEAM, HOT WATER & HOT AIR,

FOR HEATING ALL CLASSES OF BUILDING.

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64-66 W. MONROE STREET, CHICAGO.

Pipe, Fittings, Elbows, Registers, Etc.

Not in the Association.
Our Prices Have Not Advanced.
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BRAND STOVE CO.

We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges. hotel outfits, heating stoves, furnaces. hot water and steam heaters. Send for catalogue.

MILWAUKEE, WIS.

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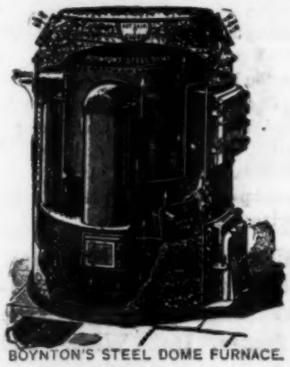
The Old Reliable

Manufacturers of
Up-To-Date Heaters

Steam, Hot Water and Hot Air



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The Usual Fall Rush of orders for Heaters is now on.

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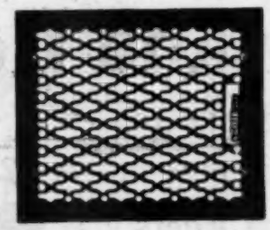
than cast Iron. Our Stamped Sheet Steel Warm Air Register. Ever use them? Best thing out. Made entirely of sheet steel. Excel cast iron in strength, air capacity, workmanship and finish. Absolutely non-breakable and are 50% lighter in weight, yet are of sufficient thickness to make them rigid, strong and serviceable. Simple in construction.



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Catalog and discounts on application.

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Office and Works, Canton, Ohio.

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Registers and Ventilators

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IMMEDIATE SHIPMENTS

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Eastern Representatives: W. H. LANDERS CO., Syracuse, N. Y.

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Gas Burner No. 5.

FOR HEATING ROOMS.

This is the most powerful as well as the most perfect gas burner for heating rooms ever placed on the market.

It works equally well with natural or illuminating gas. It is the only gas heating burner that will not light back. It is the only gas heating burner that produces a perfect combustion, and is absolutely free from odor.

When placed on a gas fixture it deflects the heat to the floor of the room, where it does the most good. It produces more heat from the same amount of gas consumed, than any other heating burner made.

Get the agency for your town. It is a specialty that sells at sight. Sample sent postpaid for 75 cents.

Patents Allowed and Others Pending.

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The House-Warming Manual

Is beyond all doubt the best book published on practical house heating.

It contains the plans and essays on heating a house submitted in THE AMERICAN ARTISAN House Warming competition for $300.00 prizes, and is in fact

An Encyclopedia of the Most Modern and Improved Practical Methods of Heating a House by Steam, Hot Water and Warm Air.

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The Aeolipyle

actually effects a saving in coal of fully 25%. It can be applied to any of the modern furnaces and boilers without any change whatever.

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Our Floor Register also is up to date.

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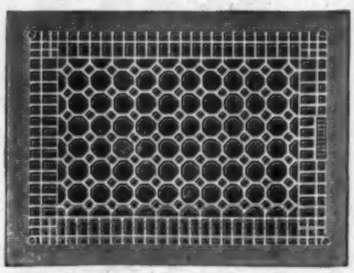

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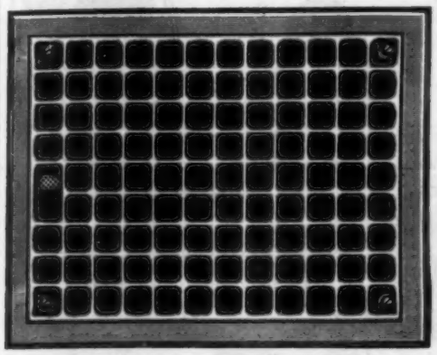

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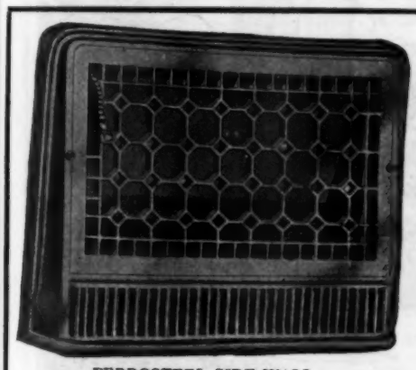

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EXAMINE GENUINE

FERROSTEEL REGISTERS

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They are

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MECHANISM PERFECT
FINISH SUPERB
PRICE LOWEST
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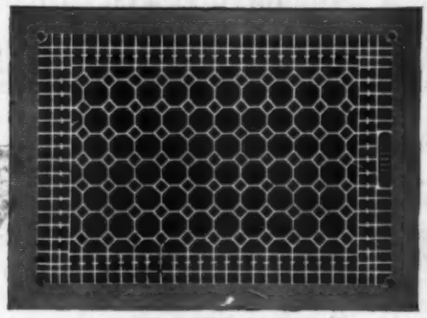

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is the Simplest, Cheapest, Strongest, Quickest Installed, Easiest Operated, Best in Principle, Lightest for Shipment, Most Practical.

Write for Circular and Free Sample.

Shipments Prompt Satisfaction Sure.

SYMONDS MFG. CO., East St. Louis, Ill.

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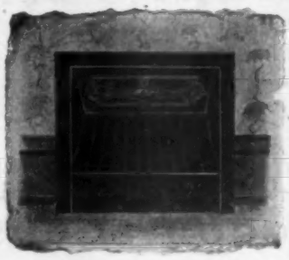

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The only one that closes tight, having no grating over front to catch dirt and dust.

Write for Catalogue.

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J. T. Walbert & Son, Paducah, Ky., write: "Our advertisement in your paper proved effectual."

ROUND OAK
Standard of America

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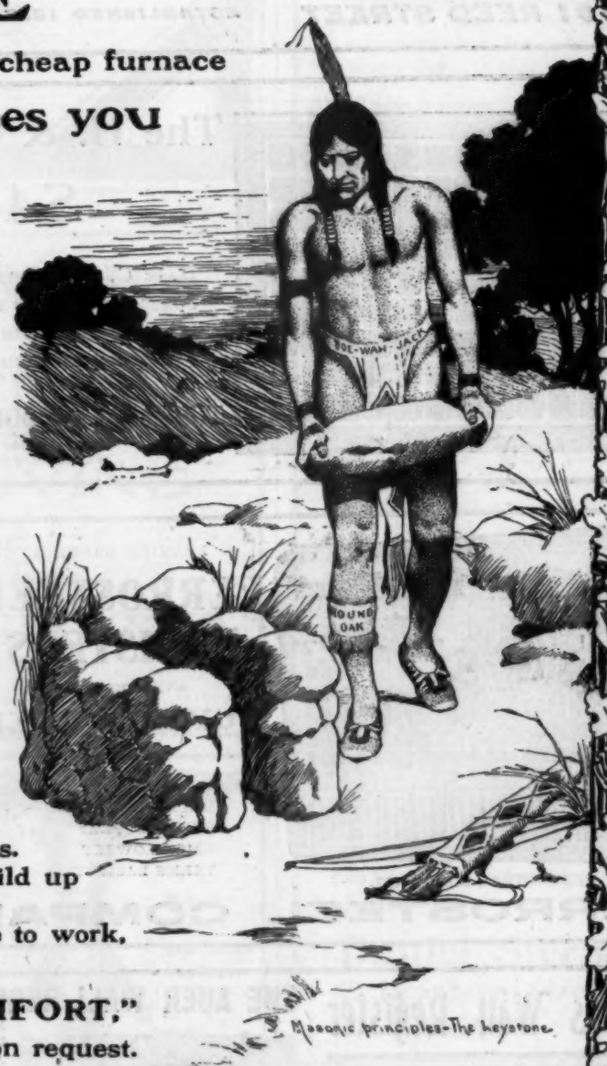
if you are handling a cheap furnace

that this fall sees you

making up your mind to

take hold of the Round Oak Furnace another year.



The field for a good furnace—a furnace of quality—and good furnace work is a fine one. Of course, we cannot prove this unless you are interested enough to

write us.

Then we will promptly show you what others are doing and from their record you can draw conclusions. It takes time, though, to build up a furnace business worth having, and you will have to work, but your reward is sure.

"WARMTH AND COMFORT," our furnace book, mailed on request.

Estate of P. D. Beckwith

Fred E. Lee, Manager

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MAKERS OF GOOD GOODS ONLY

ESTABLISHED 1880.

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Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, NOVEMBER 7, 1903.

CANADIAN hardware circles are agitated over the question as to the exact meaning of the trade term *c. i. f.* Does it mean insurance against all risk or merely insurance against some kinds of risk? This question will be determined by the courts of that country in a case now on trial.

IMPORTS into Japan from the United States for the first time exceed those from the United Kingdom. In the six months ending with June, 1903, the imports into Japan from the United States were 24,950,943 yen, against 23,803,656 from the United Kingdom. This is the first annual or semi-annual period in which the imports from the United States into Japan have exceeded those of the United Kingdom. In 1881 the imports into Japan from the United States were less than 2,000,000 yen, against more than 16,000,000 from the United Kingdom.

A PRACTICE that some hardware dealers regularly indulge in about this period of the year is that of scrimping on stock and deferring orders in order that they may have short stocks on hand when the assessor puts in an appearance. This is a short-sighted policy, as the few paltry dollars the dealer will save on his stock will be more than offset by his inability to supply orders without delay later in the season.

From present indications it will be more difficult next spring than ever before to get prompt service from the railroads and it should be remembered by every dealer that "there are others" besides himself who will want shipments made promptly when the orders are placed late.

INTERNAL-COMMERCE conditions in the United States for the month of September, as presented by the Department of Commerce and Labor through its Bureau of Statistics, are summarized as follows: The month of September in the domestic commerce of the United States is characterized as a rule by rapidly enlarging movements of staple commodities, such as live stock and grain, to primary centers, and by the accumulation of supplies of raw materials, such as lumber, coal, and other elements of industry, in manufacturing centers. Increasing shipments of produce to the seaboard and the westward movement of merchandise, together with decline in the volume of traffic on lakes, rivers, and canals, are also seasonal features of the home trade.

MARGUERITE, with her delicately tapered fingers, the result of a life of listless laziness, attracts more attention than Mary, whose hands are roughened by scrubbing floors and making bread. It is but natural that people should be drawn at first blush more by appearance than by usefulness, and in this lies an argument why the trade should handle attractive goods, like silver-plated ware, especially silver tableware. These goods can be very nicely displayed and give a tone and finish to an ordinary store. If well displayed they should sell well. It should be remembered by dealers that there is one easy month for merchants in which well-displayed and attractive goods to a large measure sell themselves, and that is the month just before Christmas. In this month the showy articles have a call over the useful ones.

AMERICANS are nothing if not patriotic. They believe that we are winners in every line of business in industrial endeavor, and there is no question but that if wide-awake citizens of this country go out after a record they are pretty sure to obtain it, but when it comes to everyday service we are behind English and continental parties in a number of ways. Automobiles have made records of 100 miles an hour in several European races; yet when an American automobile makes 60 miles an hour we speak of it as a world's record. Teutonic trolley cars have a regular schedule calling for runs of 60 miles an hour, and on the experimental railroad between Marienfelde and Zossen a speed of 125 4-5 miles an hour was recently attained in a run of 14½ miles. Take the matter of regular trains, and we find the following data concerning English and American trains, which should stir some of the braggarts about American railroads out of their lethargic complacency: The London & North Eastern Railroad makes the run from Darlington to York, 41¼ miles, in 43 minutes, or at the rate of 61 7-10 miles per hour. The Midland Railroad makes the run from Appleby to Carlisle, 30¾ miles, in 30 minutes, or at the rate of 61 5-10 miles per hour. Turning to this country we find that the Philadelphia & Reading road makes a run from Camden to Atlantic City, 57 8-10 miles, in 60 minutes, or at the rate of 57 8-10 miles per hour. The Pennsylvania makes the run from Philadelphia to Atlantic City, 59 miles, in 60 minutes, or at the rate of 59 miles per hour. The New York Central makes the run from Buffalo to New York, 440 miles, in 525 minutes, or at the rate of 50 28-100 miles per hour. The Lake Shore and New York Central makes a run from Chicago to New York, 980 miles, in 20 hours, or at the rate of 48.996 miles per hour.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

JUDGING from the way a large percentage of retail stove dealers conduct their business, one would draw the conclusion that they were in business exclusively for their health. They don't ask enough profit. For instance, a very high grade steel range possessing points of unusual merit is sold to the trade at between $65 and $70, depending on quantity bought, etc., and yet the manufacturer of this range told me the other day that a number of his customers asked only $80 or $85 for this range, and it was only the select minority who had the commercial sense to get $100 for it. The majority were scared out because their competitors were selling ranges costing $50 and $55 at $75 and $80, and they were afraid to ask a higher price for unquestionably superior goods whose greater merit could be easily demonstrated.

A friend of mine was talking to an Iron Mountain retailer the other day. This man had about 36 steel ranges on his floor, the product of eight different manufacturers. On being asked about his range business, he said, "I wish the whole kit and caboodle of ranges were in Halifax. Now take this line," he said, pointing to a well-known steel range made in the Buckeye state. "I pay $38.40 for that stove and have to sell it for $40 to meet catalogue house competition. I sell some fifty steel ranges a year, but it's precious little I make on them."

Here my friend had his say: "Do you tell me that you haul a steel range from the depot, black it, deliver it, throw in a poker, set it up, stand for defects, etc., on a total 'profit' of $1.60, or 4 per cent?"

"Well, you see, a farmer comes in here and points to a range and says, 'Hank Jones bought that identical range for $40 from a Chicago catalogue house.' What can I do? Shall I lose a sale or shall I beat the catalogue house out?"

"Let me tell you you are all wrong. The catalogue house does not sell the same grade of steel range for $40 that you buy for $38.40. Your range is of the $55 grade and it is folly on your part, injustice to the maker, the range, yourself and the entire trade to cheapen it so nauseatingly by selling it in competition with a cheaper grade of goods."

"Well, what can I do?"

"To answer a question with a question, which of these is your best ranges?"

"Well, I like the Snohomish the best."

"Why?"

"I just feel that way."

"Then if a customer came in and asked why the Snohomish was better than the Seattle you could not tell him."

"No."

"If you don't know the difference between a range that cost you $42.50 and one that cost you $35, how can you expect to explain that difference to your customers? Now these little admissions you have made show me that you are a poor salesman. It needs no Sherlock Holmes to see that you are an equally poor buyer. Here on your floor are goods made by the Chicago Steel Range Co., Grand Rapids Steel Range Co., Toledo Steel Range Co., Indianapolis Steel Range Co., Milwaukee Steel Range Co., Duluth Steel Range Co., Escanaba Steel Range Co. and Manitowoc Steel Range Co. Each of these firms sends a salesman up here to sell you, and this cost eventually comes out of your pocket. You pay freight on eight broken lots. You pay a high price and not a low price. Suppose you sell out your entire stock and buy a carload from the Escanaba Steel Range Co., let us say. You then get the benefit of carload rates on freight and, being a quantity buyer, you must get a better price. You need only learn the merits of one line and you are a great deal nearer the purchasing plane of your commercial foes the catalogue houses and department stores."

This is sound doctrine. Furthermore, catalogue house competition is more of a commercial bogy than it is an actual menace to an enterprising dealer. Along comes Ebenezer Hickory of Squash Ridge and holds up Pears-Crowcluck's catalogue with its picture of a scrumptious range with four holes, 14-inch oven and a big price tag saying *Only $24.50.* This makes the dealer frantic with nervous terror. He grabs up the manufacturer's catalogue and figures: "I pay $21.00 for that range, so do Pears-Crowclucks. If they sell that range at $3.50 profit I have to sell all my ranges at a low profit to meet their competition." And away goes $500 out of his pocket on a season's business.

Poor, short-sighted dealer! He imagines he is pouring hot shot into the catalogue house by sacrificing his profits, whereas they are making handsome profits. He thinks he is meeting their prices, whereas he is virtually underselling them. This is how the trick is turned. The dealer figures it out like this:

I pay $21 for 14 inch size, sell at $24.50; profit, $3.50.
I pay $22,75 for 16 inch size, sell at $26.25; profit, $3.50.
I pay $24.50 for 18 inch size, sell at $28; profit, $3.50.
I pay $27.25 for 20 inch size, sell at $30.75; profit, $3.50.

The catalogue house must do the same, and consequently we are both losers.

Here are the facts in the case. Pears-Crowclucks, availing themselves of every advantage of the quantity buyer, gets their goods 10 per cent lower than the retail dealer.

Their purchasing prices and selling prices are as follows:

	Purchase price.	With $3.50 added.	Their real Selling price.	Profit.
14 inch size.....	$18.90	$22.40	$24.50	$5 60
16 inch size.....	20.65	24.15	28.00	7.35
18 inch size.....	22.40	25.90	33.00	10.60
20 inch size.....	24.15	27.65	36.00	11.85

The dealer jumps at the conclusion that because the catalogue house sells a 14-inch, 4-hole size at $24.50 that its selling price for an 18-inch size will be $28.00 and its profit $3.50, at the rate of $1.75 added for each change in the oven, whereas its price for the 18-inch size is $33 and its profit $10.60. The catalogue house is not selling at cost. By an irregular system of appraisement of larger sizes it makes up for its "bait" in its 14-inch, 4-hole size, and actually sells as many 18-inch at a handsome profit as it does 14-inch at a medium profit. The way for the dealer to meet this competition is not by selling 18-inch steel ranges at $28.00 at a profit of $3.50 and telling people he is selling these goods to *meet* catalogue house competition when in reality he is $5 cheaper. He should don his commer-

cial armor and see that the catalogue houses get a Roland for their Oliver. He should not allow their cheap trick of erratically pricing ranges with different sizes of ovens to go unexposed, but should liberally advertise the fact that while he is meeting their $24.50 price on the 14-inch, 4-hole, he is selling the 18-inch range at $32, or $1 lower than they do. In doing this he would be making $4 more on an 18-inch range than he now is and instead of having the sentiment of his neighborhood declare that he was forced down in price to meet catalogue house competition, it would be generally said that he was in a position to do better than the catalogue houses on account of a mysterious business "pull" of some kind.

* * *

I FIND the following interesting item in the Youngstown (O.) Vindicator of Oct. 26:

"Miss Nora Farragher has resigned her position in the Central Union telephone exchange and has gone to the offices of the Youngstown Iron Sheet and Tube Company in the Federal building, where she will preside over the private exchange.

"Everybody using the Central Union 'phones, and especially those on the 300-400 board, will be sorry to hear that Miss Farragher has discontinued her services there. Every voice that uses the line on her board is known personally to Miss Farragher, and she was never known to permit a subscriber to ring in vain or call a second time. Because of her popularity as a telephone operator Miss Farragher was recently elected queen of the Labor carnival, an appreciation which those whom she has favored showed her in return."

Can this be truth? I am stunned as I read "She was never known to permit a subscriber to ring in vain or call a second time." I have had experience with the *nymph de telephone,* or whatever the siren of the wire may call herself, in several cities, and consequently the world whirls around me to read of this paragon of telephonic timeliness. Unfortunately this young woman of Youngstown would not be allowed to preside over the telephone that your friend Mr. Arnold uses in the course of his daily toil, as the indignant membership of the Telephone Ladies' Protective Association No. 83 would eject her bodily for infraction of the basic rules of that body.

* * *

I FIND the following interesting article in an insurance paper contrasting old line and mutual insurance in the matter of improvements. An extensive manufacturer gives his opinion on this matter as follows:

"I have about decided to place all my insurance in mutual companies. These board rates and rulings are constantly fluctuating, and I no more than get my factory equipped to meet one set of requirements than some insurance inspector comes along and pronounces the equipment or improvements n. g. Then I am asked to realter all the work or else I am told that my insurance policies will surely be canceled. One inspector will say one thing and another inspector will say just the opposite. I am of the opinion that about one-half of these board combination insurance people do not know their business, and the other half know less. Their many and varied differences of judgment are beyond an outsider's comprehension—if, indeed, within their own understanding. I think I will try the mutual insurance companies and see if any of them will write a risk without asking the owner to rebuild or improve every week or so."

* * *

IN these days the hardware man finds that he has to pay more for his flour, his beefsteak and his cinnamon, to say nothing of his trade supplies, than he did a few years ago; he can console himself, however, by the reflection that there has been a heavy decline in the price of wild animals. Performing elephants, which were worth from $1,000 to $1,500 five years ago, have dropped to $500 each; the price of wolves in London has dropped from $35 to $7.50. Think of it! You can buy an experienced wolf in fine condition for only $7.50. Pumas, which formerly sold for $500, are now down to $200, and instead of having to cough up $10,000 for a rhinoceros, $5,000 is all that is needed. The hardware dealer who grumbles about the high cost of ham can find solace in the fact that for $1.500 he can purchase a gentle giraffe, which he can chain up in his back yard for the children to play with, whereas if he had tried to get this family pet a couple of years ago it would have cost him fully $2,500.

* * *

A NEW type of elevator is being manufactured which, it is said, does away with the elevator boy. All the passenger has to do is to enter the car and push a button designating the floor he desires, when the elevator will take him up there and stop, the door being automatically opened. If he desires to go down he presses a button and the elevator stops at that floor, the door being automatically opened.

* * *

AFTER the protracted strike the dispute between masters and men at the Tynewydd Tin Plate Works, Pontnewydd, Wales, has been submitted to arbitration. It is now in order for some comparative philologist to step forward and arbitrate the name of this company.

* * *

HERE is a conversation that Wall street men insist took place between J. P. Morgan and John W. Gates at the time when the latter was doing some remarkably heavy plunging both in the stock market and at the race tracks. Wall street is recalling it just now with much interest.

"Mr. Gates, I wish you wouldn't gamble so openly. It has a bad effect on the market," said Mr. Morgan.

"The doors are open when I do things," replied Mr. Gates in his usual bluff fashion.

"Doors were made to shut," was Mr. Morgan's quiet reply, as they separated.

* * *

FROM the Marshalltown (Ia.) Times-Republican of Oct. 28 I learn that "Hardware Dealer Ed Stover was in Des Moines on business Thursday. He took down a cornstalk from his father's raising that measured 8 feet to the first ear of corn and 9 feet to the second ear from the ground. It was placed on exhibition there. It would require a pretty tall man to husk that corn or use a step ladder to climb up after the ears. The stalk was taken from Mr. Stover's field, which will yield a top No. 1 corn this year. Let us hear who can make a better showing in corn this year."

News Siftings

The United Lead Co. are about to erect a $3,000,000 plant at Granite City, Ill.

The Baskey Hardware Co., Rochester, Ind., were visited by burglars recently.

Lawrence E. Jensen succeeds Hans Jensen in the hardware business at Poplar, Iowa.

The Rowley Scale & Supply Co., capitalized at $10,000, are a new Detroit, Mich., concern.

John G. Dunn, S. P. Holding, W. W. Holding and J. L. Allen are the incorporators of the Wake Forest Foundry Co., Wake Forest, N. C., capitalized at $10,000.

Allen Smalley, W. G. Gardiner, John G. Gehan, and Eugene D. Gray are the incorporators of the Peerless Mica & Kaolin Co., Harrison, Ark., capitalized at $250,000.

Wormnest Bros. Co., Grand Rapids, Mich., have purchased a plot of land, 200x300 feet in dimensions, in that city for a warehouse, which they will use for the storage of stoves in particular.

Paul J. Ziedler, F. N. Baker and H. I. Baker are the incorporators of the Ziedler Bros. Lamp Co., Fond du Lac, Wis., capitalized at $12,000 for the manufacture of the Lomira gasolene vapor lamps.

At a meeting of leading steel and iron manufacturers held recently in New York City it was reported that arrangements had been made for a reduction of $4 a ton in the price of billets, making the new price $23 a ton.

The Faultless Mfg. Co. are now located in their new malleable foundry at St. Charles, Ill. They are pointing out to the trade the advantages of buying malleable steel ranges for cash, as purchases thus made, enable the trade in turn to make good prices to their customers.

E. H. Kastor is president, L. D. Kingsland is vice-president, H. L. Hartford is secretary and R. H. Kastor is treasurer of the Coaleo Fuel Manufacturing Co., St. Louis, Mo., incorporated with a capital stock of $500,000, for the manufacture of coaleo, a substitute for coal.

The Culter & Proctor Stove Co., Peoria, Ill., are makers of the Brilliant Peoria, a popular double heating base burner for hard coal. It is very economical and powerful and is a quick operator. It has a perfect circulation of the air and an admirable hot air flue construction.

The Chicago Stove & Range Co., Chicago, who recently purchased the plant of the Mississippi Valley Stove Co., Fulton, Ill., will probably put that foundry in operation and make a full line of cast goods, which they will both market direct and also through their Chicago office.

Annie C. Robertson, Quincy, Ill., and Mearl B. Waltz, Chicago, filed a bill for a receiver in the Superior Court of Cook County on Oct. 30th for the Bonnett-Nance Stove Co., of Chicago Heights, Ill. They allege that the families of John J. Bonnett and Richard W. Nance practically controlled the business, and are using their positions for personal profit to themselves. The total indebtedness of the company is said to be nearly $75,000, and it is said to be increasing at the rate of $5,000 per year.

J. F. Ferry, Leadville, Colo., has invented a device for use in ovens, stoves, ranges or the like, the object being to provide a ventilator so arranged as to automatically open upon the opening of an oven door and permit the escape into a flue of smoke and fumes that may be in the oven.

The Royal Stove & Range Co., Greenville, O., are at present working on a magazine soft coal burner, which they will have ready for the trade shortly. Their experiments have shown it to be especially successful if applied to the hot blast. This firm report a heavy demand for their steel ranges, steel cooks, air-tight oak heaters, hot blasts, etc.

The Magee Furnace Co., 32-38 Union St., Boston, Mass., are manufacturers of the Magee Double Oven Kitchener, for use in hotels, boarding houses, restaurants and private dwellings. This range is made in portable form or for brick setting; it is also designed for hard coal or wood. It is furnished with low hot closet, or with high shelf, high closet or plate rack.

The Royal Stove & Range Co., Greenville, O., are makers of the Royal Oak, which has many points to recommend it to the trade. The body is of the best quality of heavy refined steel highly polished. The fire pot is of heavy corrugated cast iron closely fitted to the base in air tight joints. The base and ash pit are made in one piece and are absolutely air tight. The doors are filed, are fitted perfectly and are self-fastening. The grates are extra heavy, draw center shaking for coal and coke. The registers are ground to fit air tight.

A. J. Conover, secretary of the Gem City Stove Co., Dayton, O., is well known to the stove fraternity as the suave, aggressive man behind the Clermont stoves and ranges. Mr. Conover is a potent force in the industrial life of the prosperous city of Dayton, as he is vice-president of the Dayton National Bank, president of the Royal Remedy & Extract Co., and is also president of the Dayton Savings & Trust Company. In spite of his numerous fields of business activity Mr. Conover finds abundant time for a friendly chat with a visitor.

Bergstrom Bros. & Co., Neenah, Wis., send us a batch of enameled blotters, advertising various of their stoves. The Meteor is a new coal stove, with ovens nearly square, dumping grates, cut centers, heavy fire backs, ring covers and enameled reservoirs. The Harold for wood has ovens nearly square, heavy fire back, cut centers, ring covers, enameled, and reservoirs. The Titan for wood has almost square ovens, cut centers and ring covers, and bailed ash pans. The nickeled parts include oven shelf and oven ornaments, tea stands and towel racks. The Lustro for coal has almost square ovens, cut centers and ring covers, bailed ash pan, nickeled oven shelf, nickeled oven ornaments and nickeled tea stands and nickeled towel rods.

The Mt. Penn Stove Works, Reading, Pa., send us one of their latest catalogues of Penn stoves, ranges and furnaces. They are making the Penn Esther

range in 168 different styles and sizes. Other of their stoves are the Penn Glory range, Penn Item range, Penn Elmo range, Marigold range, New Albion cook, Automatic cook, Penn Diamond square parlor stove and double heater, Penn Royal square parlor stove and double heater, Penn Baron double heater, Penn Opal parlor stove, Penn Oak, Penn Air-Tight, Penn Franklin open parlor stove, Penn Juliet fireplace heater, Vida, Magic, Express, Allison, Charm, Daisy, Monday, Penn Dock, Penn Ruby, Penn Hope double heater, Penn Coin, Penn Pearl, Ethel, Dora, Penn Perfect furnace, Penn Comfort furnace, etc.

The Schill Bros. Co., Crestline, O., manufacturers of furnaces, stoves and ranges, advise us that the recent explosion of the car of dynamite in the yards of the Pennsylvania Railroad Co. at Crestline has in no way interfered with the running of their factory, and that they are in a position to fill orders promptly. Aside from the windows which were blown in from the explosion, they suffered no loss. One end of their molding room was moved off the foundation, but was placed in position again in a few hours. This explosion occurred about a mile west of Crestline on Nov. 1. Some of the firm's agents in Pennsylvania have advised them that they distinctly felt the shock at a distance of over 200 miles away. Between 300 and 400 freight cars were blown to pieces. Some of the car wheels and complete trucks were thrown nearly a quarter of a mile and practically every house in the city had several windows broken.

IDEAL EPWORTH ACETYLENE GENERATOR.

The Epworth Gas Light & Heating Co., Waterloo, Ia., are manufacturers of the Ideal Epworth acetylene generator shown in the accompanying cut. This machine has a stirring device that stirs up the refuse at the top and the bottom at the same time. The gas rises through the water and carries to the surface the finer particles from the lime. The gas on its way from the generator to the holder passes through a chamber in the base of the holder, where it is washed and purified by passing through a special preparation. After passing from the holder the gas is passed through a filter that again filters and dries it. These machines can be charged while the burners are in use, as the charging does not affect them, nor is there any escape of gas while charging.

deal IEpworth Acetylene Generator.

THE WONDERFUL DORAN LIGHT.

The Acorn Brass Mfg. Co., Chicago, send us a marvelously beautiful catalogue describing their Doran light. The typography, press work and particularly the illustrations are exquisitely clear and accurate, and after a perusal of this volume one feels that he knows the Doran light as well as if he had seen it "in the flesh," or, to be more accurate, "in the metal."

This system is easily operated, as it takes only 30 seconds to heat a generator on each lamp. There is a small piece of asbestos between the mantels and beneath the generator, upon which the alcohol is put from a bulb so equipped that the light can be generated without the least trouble.

The seven-gallon tank can be filled while the lights are burning. The generator is situated between the mantles and the gasolene is conducted thereto and is immediately vaporized by the heat of the mantles.

The generators are interchangeable and an extra generator accompanies each light, so that when a generator has shown a defect the user can exchange it for a good one. This firm use thorium as the basic chemical of their mantles.

Among the recent testimonials this firm have received regarding the merits of their lights is the following from the Nelson Hardware Co., Gowrie, Ia., who write this firm:

"The lamps we bought in April, 1901, are giving very satisfactory service. They have been in constant use since and we find them very economical in the consumption of gasolene, as well as in breakage of mantles. Every one in town acknowledges we have the best light and nearly all makes of lamps are represented here. The wire does not clog in the least, as we find by testing."

CURTAILMENT OF PIG IRON OUTPUT.

Representatives of the producers of the pig iron in the East held a meeting in Philadelphia Nov. 2, at which the unanimous sentiment was to continue the curtailment in the output of their product for at least another month. Though a reduction of 20 per cent was authorized for the month of October, it was found to-day that the curtailment had actually reached 39 per cent. It was decided that this percentage in the reduction should continue. Labor troubles in Eastern cities is the chief cause of the curtailment.

LETTER NO. 1200-S, IS DEFUNCT.

There's another little grave in the association cemetery. That happy, playful 7-year-old, the Shovel Association, became frightened at a Hallowe'en jack-o'-lantern and fell dead Oct. 31 last. Its little pool is all dried up, as John H. Parks, the treasurer, sent out the following notice on the last day of last month:

"This is to notify you that I do hereby avail myself of the right which I originally reserved, to revoke and cancel my conditional offer to you of a premium on your purchases of shovels, spades and scoops, as per my printed Letter No. 1200-S.

"Said conditional offer No. 1200-S, of a premium, will not apply on your purchases of shovels, spades and scoops after this date."

To the uninitiated we would state that Letter No. 1200-S was the little joker that made the shovel pool possible, as it provided a system of rebates for jobbers who gave their exclusive patronage to members of the pool and made the path of outside manufacturers a thorny one.

C. F. Turner has purchased a half interest in the hardware store of D. B. Gooch, Browning, Mo.

The Hardware Record.

American Hdw. Mnfs. Assn.
Pres., F. R. Plumb, Philadelphia.
Vice-Pres.—F. S. Kretsinger, Ft. Madison, Ia.; J. C. Birge, St. Louis; Geo. W. Corbin, New Britain, Conn.
S.-T., F. D. Mitchell, Pittsburg.
Ex. Com., Robert Garland, Pittsburg; Henry B. Lupton, Pittsburg; N. A. Gladding, Indianapolis; W. S. McKinney, Allegheny; F. L. Clark; Birmingham; C. W. Asbury, Philadelphia; G. M. Landers, New Britain; C. H. Holt, Cleveland.

Arkansas Retail Hdw. Dealers' Assn.
Pres., J. F. Maxey, Ozark.
1st V.-P., H. Williams, Hot Springs
2d V.-P., A. L. Skillern, Nashville.
S.-T., C. E. Taylor, Little Rock.
Ex. Com., C. T. Rosenthal, Batesville; T. B. Stewart, Newport; E. E. Mitchell, Morrilton; W. M. Graham, Clarendon; R. F. Roys, Russelville.

Chicago Retail Hdw. Dealers' Assn.
Pres., D. McLaughlin.
V.-P., H. E. Gnadt.
Sec., G. R. Lott.
Collector, John Hora.
Treas., J. L. Smith.

Hardware Merchants' and Manufacturers' Assn. of Philadelphia.
Pres William C. Peters.
V.-P., Thomas Devin.
Sec.-Treas., T. James Fernley.
Directors, W. W. Supplee, H. McCaffrey, E. S. Jackson, W. C. Peters, S. Disston, E. Fisher, J. H. Ritter, T. Devlin, T. J. Fernley.

Illinois Retail Hdw. Dealers' Assn.
Pres., Charles H. Williams, Streator.
V.-P., W. T. Gormley, Chicago.
Sec., L. Nish, Elgin.
Treas., Geo. A. Engelhardt, Chicago.
Ex. Com., Charles H. Williams, Streator; W. T. Gormley, Chicago; L. Nish, Elgin; Geo. A. Engelhardt, Chicago; William Bittel, Peoria; F. F. Porter, Chicago; H. G. Cormick, Centralia; H. N. Murphy, Galesburg; R. G. Scheurer, Vandalia.

Indiana Retail Hdw. Dealers' Assn.
Pres., E. M. Bush, Evansville.
1st V.-P., A. N. Shidler, So. Bend.
2d V.-P., W. B. Shipley, LaFayette.
Sec., M. L. Corey, Argos.
Ex. Com., M. L. Lewis, Marion; W. P. Lewis, New Albany; Charles Boonshat Petersburg; E. M. Bush, Evansville; M. L. Corey, Argos.

Indian Territory Retail Hdw. Assn.
Pres., J. G. Smith, Canadian.
1st V.P., Fred Parkinson, Wagoner.
2d V.-P., E. C. Stretch, Vinita.

Iowa Retail Hdw. Dealers' Assn.
Pres. S. R. Miles, Mason City
V.-P., L. Lindenberg, Dubuque.
Sec., H. S. Vincent, Ft. Dodge.
Treas., A. C. Vieth, Oakland.
Members Exec. Com., Jacob Seither, Keokuk; J. F. Doty, West Liberty; L. Lindenberg, Dubuque; S. R. Miles, Mason City; G. C. Paulson, Newnall; Paul DeVol, Council Bluffs; C. S. Barger, Albia; L. H. Kurtz, Des Moines; C. R. Keating, Mt. Ayr; L. A. Gnam, Carroll; C. E. Haas, LeMars.

Kansas Hardware Dealers' Assn.
Pres., Oscar Roehr, Topeka.
V.-P., E. J. King, Logan.
Sec.-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kiniry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J. O'Neill, Osage City.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., W. T. Oldham, Mt. Sterling.
1st V.-P., W. S. Shacklett, Fulton.
2d V.-P., Jos. C. Kirchdorfer, Louisville.
Sec., Paul Wagner, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.
Pres., John Popp, Saginaw.
V. Pres., F. M. Brockett, Battle Creek.
Treas., Henry C. Weber, Detroit.
Sec., A. J. Scott, Marine City.
Ex-Com., W. P. Culver, Portland; K. S. Judson, Grand Rapids; J. N. Whitney, Merrill; E. J. Morgan, Cadillac; T. Frank Ireland, Belding; Fred. S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott, Marine City.

Minnesota Retail Hardware Assn.
Pres., W. H. Tomlinson, LeSueur
V.-P., H. S. Cleveland, Minneapolis.
Treas., W. E. Barto, Long Prairie
Sec., M. S. Matthews, Mnpls.
Ex. Com., W. H. Tomlinson, Le Sueur; H. S. Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; Benj. F. Kernkamp, St. Paul; C. H. Hornburg, New Ulm; J. Cowing, Alexandria; C. H. Casey, Jordan; C. F. Ladner, St. Cloud, J. Schmidt, Wabasha; A. T. Stebbins, Rochester; J. McGuire, St. Paul.

Missouri Retail Stove and Hardware Dealers' Association.
Pres., Taylor Frier, Louisiana.
V.-P., E. L. Wachter, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., J. W. Poland, Carrollton; F. N. Kannsteiner, St. Louis, W. T. Shoop, Richmond.

National Hardware Association.
Pres., R. A. Kirk, St. Paul.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., John Freeman, Detroit; Samuel B. Bigelow, Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. W. Shapleigh, St. Louis.

Nebraska Retail Hdw. Dealers' Asn.
Pres. C. A. Peterson, Oakland.
1st V.-P. Nathan Roberts, Omaha.
2d V.-P. Alex Meyer, Hastings.
3d V.-P. Frank Hacker, Friend.
Sec.-Treas., Harry Hall, Lincoln.

National Retail Hdw. Dealers' Asn.
Pres., W. P. Bogardus, Mt Vernon, O.
V.-P., C. H. Miller, Pennsylvania.
Sec., Treas., M. L. Corey, Argos, Ind.
Ex. Com., H. G. Cormick, Centralia, Ill.; Sharon E. Jones, Richmond, Ind.; T. F. Ireland, Belding, Mich.; L. Lindenberg, Dubuque, Iowa; A. T. Stebbins, Rochester, Minn.

N. Dakota Retail Hdw. Dealers' Asn.
Pres., H. N. Joy, Hamilton.
1st V.-P., H. F. Emery, Fargo.
2d V.-P., Frank Lish, Dickinson.
3d V.-P., H. B. Allen, Jamestown.
Sec., C. N. Barnes, Grand Forks.
Treas., W. H. Pinkerton, Lakota.
Ex. Com., E. E. Elliott, Sanborn; H. F. Strehlow, Casselton; Hurbert Harrington, Fargo.

Ohio Hardware Association.
Pres., W. P. Bogardus, Mt. Vernon.
V.-P. J. F. Baker, Dayton.
Cor. Sec., D. R. Burr, Piqua.
Fin. Sec., W. C. Jones, Columbus.
Treas., H. A. Waller, Ravena.
Ex. Com. F. A. Powers, Norwalk; Geo. Hartke, Cincinnati; E. Fisher, Wapakoneta; J. C. Snyder, Ironton; E. M. Potter, Cleveland.

Pennsylvania Retail Hdw. Assn.
Pres., Geo. L. Moore, Brownsville.
V.-P., Geo. J. Rudolph, Pittsburg.
Sec., J. E. Digby, McKees Rocks.
Treas., B. A. Maggine, Braddock.
Ex. Com., E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock; C. O. Shroyer, Dawson.

St. Louis Stove Dealers' Assn.
Pres., Wm. H. Hahn.
1st V.-P., G. A. Pauly.
2d V.-P., E. L. Wachter.
Sec., Louis Boehl.
Treas., E. Wertz.

Southern Hardware Jobbers' Assn.
Pres., W. M. Crumley, Atlanta, Ga.
1st V.-P., John Donnan, Richmond, Va.
2d V.-P., E. A. Peden, Houston, Texas.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Hardware Jobbers' Assn.
Pres., J. C. Bering, Houston.
1st V.-P., J. Burnside, Ft. Worth.
2d V.-P., J. Taylor, Sherman.
Sec.-Treas., R. Bell, Weatherford.

Wisconsin Hdw. Dealers' Assn.
Pres., L. Findiesen, Green Bay.
V.-P., H. L. McNamara, Janesville.
Sec.-Treas., C. A. Peck, Berlin.
Ex. Com., J. Kornelly, Milwaukee; E. H. Ramm, New London; H. S. Scofield, Sturgeon Bay; R. Murdoch, Beloit.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 40 to 44 inclusive.

E. S. S. Allen & Bro., Independence, Ia., hardware dealers, were victims of burglars recently.

John W. Wagner, president of the Wagner Hardware Co., Mansfield, O., died in that city recently.

The Albert Lea Hardware Co., Albert Lea, Minn., are making important improvements to their store.

On October 29th, 11:30 p. m., the hardware store of V. N. Mackey, Clyde, Ohio, was destroyed by fire.

The Standard Hardware Supply Co., Chicago, have decreased their capital stock from $20,000 to $10,000.

Brown & Sehler, Grand Rapids, Mich., hardware dealers, have spent $5,000 in improving the interior of their store.

J. H. Folk and C. L. Hopper have purchased the hardware business of Avery, Folk & Co., Bowling Green, Ohio.

The Missouri Valley Hardware Jobbers' Association held their semi-annual meeting at St. Joseph, Mo., on Oct. 28th last.

The Southwestern Kansas and Oklahoma Implement and Hardware Dealers' Association will meet in Wichita, Dec. 8, 9 and 10.

John A. Lane, a Marshalltown, Ia., hardware dealer, has filed a petition in bankruptcy with liabilities of $7,900 and assets of $6,600.

J. F. Gilliland, Lancaster, O., will make a 75-foot addition to his bracket factory, which will result in the employment of 50 more men.

Josiah Master and Thomas Morris have purchased the stock of hardware of Dayton & Vail, Keota, Ia., and will take possession on the 20th of November.

Ullery & Jones, hardware dealers at Gibson City, Ill., were visited by burglars on the night of Nov. 3 and $100 worth of razors, revolvers and jewelry were stolen.

F. D. Bullard, J. R. Haynes, West Hughes, H. Bert Ellis and T. F. Miller are the incorporators of the Bullard Automatic Wrench Co., Los Angeles, Cal., capitalized at $100,000.

The Hartford Machine Screw Co., Hartford, Conn., are building an addition, 130x30 feet in dimensions, which they will use as an enlargement to their polishing and plating departments.

The Hogrefe Hardware Co., Augusta, Ga., have received a charter. Chas. Hogrefe, John J. Evans and Louis Evans are the incorporators. This company has a capital stock of $3,000.

The Richards Mfg. Co., Aurora, Ill., manufacturers of a very complete line of door hangers and other hardware specialties, will move into their new factory Jan. 1st. They have recently purchased the plant of the Richards-Sencenbaugh Mfg. Co. of that city and are operating that plant also.

Iwan Bros., Streator, Ill., the well-known manufacturers of hardware specialties, are giving their friends

in the trade a handsome morocco cigar holder with gold fretwork edges. It is a novel, useful and very ornamental souvenir.

At the tenth annual meeting of the Victorian Hardware Assistants and Trade Association, Melbourne, Australia, J. S. Henderson was re-elected as president and G. S. Lowrey as secretary.

J. H. Mann, Jr., who has been on the road for the Gray & Dudley Hardware Co., Nashville, Tenn., for the past eight years, will now take charge of their Nashville house as sales manager.

J. L. Schultz is president, W. H. Francis is vice-president and Chas. Randall is secretary and treasurer of the Seymour Commercial Co., who will embark in the hardware business at Seymour, Texas.

Daniel Hemperly, Frank Hemperly, Emma G. Hemperly, Emma K. Hemperly and W. E. N. Hemperly are the incorporators of the Hemperly Hardware Co., Massillon, Ohio, capitalized at $15,000.

The Bridgeport Chain Co., Bridgeport, Conn., have just issued their catalogue No. 8 showing a line of goods not given in their preceding catalogues, including chains, key rings, halter snaps, steel hooks and rings, chain fasteners, etc.

The Fawkes Mfg. Co., Minneapolis, Minn., were recently incorporated with a capital stock of $25,000, and will manufacture the Fawkes double acting washing machine, and also a line of cream separators, ice cream freezers and sad irons.

F. C. Cutler of the Cutler Hardware Co., Waterloo, Ia., was among a delegation of business men of that city who took a trip over the Omaha branch of the Chicago & Great Western railway on Oct. 26 last with a view of opening up that section of the state to Waterloo trade.

Geo. H. Harris is president, H. V. Dimmick is vice-president, Daniel B. Dimmick is general manager and J. E. Dow is secretary and treasurer of the American Casting Co., Birmingham, Ala., capitalized at $20,000, for the manufacture of hardware specialties, small castings, etc.

F. J. Gibbons, a Monett, Mo., hardware dealer, was accidentally shot about 6 p. m., Oct. 28, and died at 10 p. m. It appears that a young man in that town named Frank Smith had gone into the store to purchase cartridges, and while loading his revolver it was discharged, the bullet striking Mr. Gibbons in the abdomen.

J. N. Biddle & Co., 6049 Ellis avenue, Chicago, advise us of their recent receipt of over a ton of cash register paper and a large stock of cash registers on which they are prepared to make attractive prices. Their line of goods includes Standard cash registers, secondhand registers, cash register paper and duplicating sales books.

J. A. Krider, 1262 Monadnock building, Chicago, who is Chicago and Northwestern sales agent for the Cleveland Cap & Screw Co., Cleveland, O., sends us a recent circular of this company calling attention to the fact that they use the United States standard head as the common standard for hexagon head cap screws and hexagon nuts. The large bearing surface under the head affords better distribution of pressure, permits the use of cored holes, saves drilling and dispenses with washers.

The Diamond Saw & Stamping Works, 357-361 Seventh street, Buffalo, N. Y., send us a little desk calendar for the month of November. They call attention to the fact that it is better for the trade to build up a reputation with Sterling hack saws and have long-staying customers, than to sell others and be constantly seeking new people to take them.

The Window Glass Workers' Association, one of the leading labor unions of the country, has loaned the Federation Window Glass Co., Columbus, O., $75,000 without interest to enable that company to carry its stock of glass. By this action higher prices will be established and the Federation Window Glass Co. will start its plant on Nov. 11 and will pay an advance of 10 per cent over the wage scale of last season.

Iwan Bros., Streator, Ill., are manufacturers of a variety of desirable hardware specialties, including Iwan's improved post hole and well auger for fence, telephone, telegraph and electric light post holes, wells, prospecting, earth testing, plumbing, etc., and Iwan's serrated hay knife with waving edge and adjustable handles with malleable iron or wood grips. This knife has a cutting edge of four serrated sections of high-grade tool steel riveted to strong malleable iron bar.

F. E. Kohler & Co., Canton, O., advise us in a recent favor that they have just installed a 50-h. p. gas engine of the double-cylinder type, to operate their shovel department. They have also made various improvements in that department to facilitate the work and produce smooth goods. It is their idea to build up a trade gradually in this line and they are already meeting with better success than they anticipated, notwithstanding the tactics employed by the trust to hinder outside manufacturers. They propose to increase the line gradually and will have several grades.

A RETAIL HARDWARE DEALERS' CATALOGUE.

Cornell Bros., leading Ord, Neb., retail hardware dealers, issue an attractive 36-page catalogue in a pink cover that gives cuts, descriptions and prices of a great variety of goods. Taken in liberal doses by the "Ord"-ained, as the residents of that city should probably be designated, it should prove an excellent antidote for *cataloguisis*, a bucolic disease whose victims have an hallucination that a mail order catalogue is a revised Bible. People appreciate local enterprise. They like to have local dealers issue catalogues on this order. When they go away from home they brag about the local store. A glance at this shows that Cornell Bros. carry a comprehensive stock, which includes the Grand Superb steel range, the German heater, Cole's original hot blast; Superior air-tight oaks, Standard gasolene and wickless blue-flame oil stoves, Fairbury windmills, country water systems, etc. A couple of interesting pages in this volume are pages 14 and 15, "Ladies' page" and "Gentlemen's page," respectively. The former gives the following list of articles used the year around by ladies: Washing machines, churns, stew pans, coffee pots, table knives and forks, tin cups, lard cans, flour sifters, pot lids, scrub brushes, stove shovels,

wash boilers, clothes lines, tea kettles, cook stoves, dippers, milk cans, wash tubs, coffee mills, dust pans, stove polish, lid lifters, wash boards, stew kettles, tea pots, spoons, tin pails, milk strainers, pie tins, mop sticks, stove pipe, scissors, stove enamel.

The latter gives the following list of articles used the year around by gentlemen: Pocket knives, hammers, wire stretcher, axle grease, pumps, windmills, staples, nails, spades, scoops, barb wire, Grand Island hog fencing, Dillon fence, squares, vegetable scoops, levels, wood jack planes, bits and brace, hand saws, wood saws, cross-cut saws, axes, shovels, forks, post diggers, cow ties, rope, guns, shells, harness oil, gun oil, razors, fork handle, shovel handles.

JOBBERS STAND SHOULDER TO SHOULDER WITH RETAILERS.

The Philadelphia North American of Oct. 30 says: "Members of the National Hardware Association of this city are arranging to attend the ninth annual convention of the organization to be held in Atlantic City, Nov. 18, 19 and 20, when it is expected that body will place itself on record against the parcels post system, which is suggested in a bill to be presented to Congress.

"The hardware men of the country, according to T. James Fernley, secretary-treasurer of the association, are opposed to the government doing an express business and are of the opinion that the system would not be in the interest of the commerce of the county. The plan is to consolidate the third and fourth class mail under a parcels post system. The rate for merchandise, third class, is now sixteen cents a pound.

"It is proposed to put both third and fourth class mail on a flat footing of perhaps five cents a pound. Newspapers would come under this class.

"With the parcels post system the hardware men say that catalogue houses, that is, business houses which sell over the country at retail by catalogue, would have the newspapers and periodicals help pay the difference in postage rates which they are now compelled to pay on merchandise sent out by them.

"They could, with a low rate of postage, send goods into cities from one end of the country to the other at less cost than the retailer can now sell in his own city, to the detriment of the home dealer, their expenses being minimized.

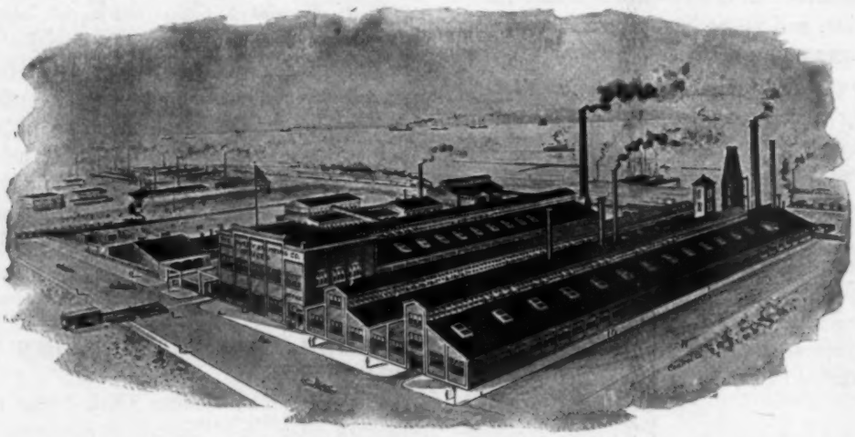
"The members of the organization employ 300 salesmen and do a business of nearly $200,000,000 a year. Members come from thirty-nine states."

The retail hardware men of the country will rejoice in this splendid co-operation of the jobbers.

WHERE NEVER-BREAK GOODS ARE MADE.

The accompanying cut shows the factory of the Avery Stamping Co., Cleveland, O., manufacturers of the Never-Break steel wares, steel shovels, scoops, spades, etc. The site of their plant comprises over three acres and the buildings are of the most improved construction.

This firm have been in existence nearly twenty years and have achieved a decided reputation for the Never-Break goods, which they originated. Prominent among their lines, which include steel spiders, griddles, kettles, stew pots, stew pans and heavy steel retinned cooking utensils, especially adapted for hotel, restaurant and railway dining-car service, are steel shovels, scoops and spades, of Cleveland or hollow back pattern, and the latest style plain back shovels and spades. The latter are claimed to be the strongest, simplest and at the same time most uniquely constructed goods ever produced in the history of the shovel industry. They are rapidly setting a new standard in the shovel market. This firm manufacture thousands of pieces of hollow ware every day, and their capacity in their shovel department is 200 dozens per day, with corresponding shipping facilities. Their seasonable specialties include Alaska steel snow shovels, Tropic ash shovels and Klondike sidewalk cleaners. All goods turned out by this company are highly finished and guaranteed to be second to none.



Factory of Avery Stamping Company.

MEETING OF ILLINOIS RETAIL HARDWARE DEALERS MAY BE POSTPONED.

A number of influential members of the Illinois Retail Hardware Dealers Association, including President Williams and Secretary Nish, are in favor of postponing the forthcoming meeting of the association, which is scheduled to meet at East St. Louis in the middle of February, 1904, in order that the membership may attend the St. Louis Exposition in a body. It is believed by the association that this program would prove a strong magnet to draw non-members to the meeting and also into the ranks of the association.

Secretary L. D. Nish, Elgin, Ill., has already a large number of letters from members advocating this postponement, and we would urge the members of the Illinois association to apprise Mr. Nish of their views on this matter so as to give ample data as to the views of the individual members of the association for the Executive Committee to act upon when they meet in East St. Louis in December next.

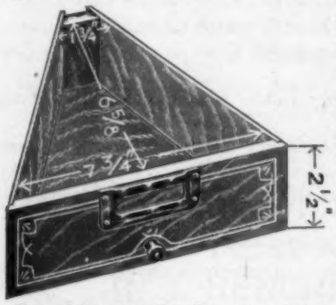
BOLT AND SCREW CASES.

The American Bolt & Screw Case Co., Dayton, O., are offering the trade a line of bolt and screw cases, some of the salient features of which are shown in the accompanying illustrations. In the construction of these cases this firm are now using iron standards, screwed firmly into an iron hub in the bottom. The tops and bottoms are double, with the grain of the wood crossed, glued and screwed together, and braced with iron rods, which bind the whole firmly together; thus making it strong enough to bear three times the weight that can be put into them, and by which means they revolve perfectly true and easy.

Screw Case.

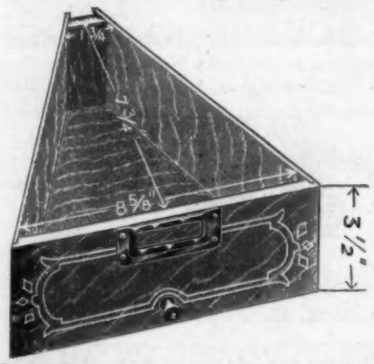
Size of Drawers for Nos. 1 and 2 Screw Cases.

Both bolt and screw cases are made of the best seasoned Tennessee poplar, finished in imitation of cherry. The fronts of drawers are made of the best Norway pine, with the sizes they contain nicely printed thereon, making it a most desirable adjunct to hardware stores. The drawers are all provided with stops to prevent their removal from the case. Each drawer holds a package of bolts or screws of the size and number indicated on the front of the drawer.



Size of Drawers for Nos. 3 and 4 Screw Cases.

This firm have perfected a locking device for these cases. It is so arranged that all the drawers can be locked and unlocked at one time. There is a lever attached to the case on the under side, and is only accessible to the person behind the counter. By pressing this lever down it unlocks the drawers and engages in a catch, which holds it in this position until it is desired to lock the drawers again, when by a slight touch the lever is disengaged and the drawers are locked again.



Size of V-Shaped Drawers for Nos. 1 and 2 Bolt Cases.

When these cases are to be used for fine tools and other valuable articles, they can be provided with lock and key, so that only the person having a key has access to the drawers.

The square drawers in the base of Nos. 1 and 2 belt and Nos. 5 and 6 cases, with plain drawer fronts, are not provided with the locking device without key, but each drawer is provided with a separate lock with interchangeable key, when cases are ordered with key.

RIFLE SHOOTING AT FLYING OBJECTS.

The sport of shooting at flying or moving objects with a rifle is increasing in popularity, and several noteworthy performances in this line of sport have occurred recently.

Prominent among those who have achieved success in this direction is LeRoy Leach, whose performance at Wood Lake, Neb., on Aug. 2, was claimed at that time to be the world's record in that line of shooting. Mr. Leach shot at 1¾-inch wooden blocks, thrown into the air by two assistants. He used a 22-caliber repeating rifle and a single bullet. The targets, 1,000 in number, were thrown by W. L. Chrysler and E. Tryon. One rifle was used throughout the shooting, which was fitted with plain, open sights. The score made was as follows:

Shot at.	Broke.	Missed.
50	48	First 2
50	47	First and last 2
450	448	Last 2
450	447	First 3
1,000	990	10

This performance was duly witnessed and its correctness sworn to before a notary public. Excellent though it was, it did not satisfy Mr. Leach, who essayed to hit 1,000 targets straight. On Oct. 14 he attempted and accomplished this remarkable feat. It was also done at Wood Lake. Mr. Leach shot at the same 1¾-inch targets at a distance of 20 feet. He used a repeating rifle. At both contests he used Peters 22 short cartridges, loaded with King's Semi-Smokeless Powder, and did not wipe the barrel throughout the 1,000 shots. These shells are made by the Peters Cartridge Co., Cincinnati, O.

This shooting was witnessed by I. J. Leach, Oliver Hall, A. S. McNamee, and C. E. Dennis, who made affidavit as to its correctness, which was sworn to before A. C. Johnson, a notary public at Wood Lake, Neb.

Mr. Leach is county surveyor of Cherry County, Neb. Shooting with him is a mere pastime, and his performance on Aug. 2 was his first attempt to make a world's record.

At the recent Atlanta, Ga., trap shooting tournament, Harry Hall of Albany, Ga., made high average, breaking 163 out of 175 targets. Mr. Hall used Peters

factory loaded shells, manufactured by the Peters Cartridge Co., Cincinnati, O.

At Millbrook, N. Y., Oct. 16, in a 100-target race for a gold medal and the Dutchess county championship, F. B. Stephenson, who was the only man to break 25 straight, was the winner. He used Peters Premier factory loaded shells, manufactured by the Peters Cartridge Co., Cincinnati, O.

On Oct. 12 and 13, at Mahanoy City, Pa., Neaf Apgar won high expert average and Fen Cooper high amateur average. Both used Peters Ideal factory loaded shells, made by the Peters Cartridge Co., Cincinnati, O.

At Raleigh, N. C., on Oct. 21, Walter Hoff, of the Hazard Powder Co., won high average and made a run of 99 straight with Peters Ideal shells loaded with Hazard powder. These shells are made by the Peters Cartridge Co., Cincinnati, O.

GRAPHITE LUBRICANTS.

The Jos. Dixon Crucible Co., Jersey City, N. J., send us a booklet entitled "Graphite Lubricants." This tells how pure graphite has an unctuous quality in spite of its solidity; how there are variations in the crystalline form ranging from molybdenitish foliations to columnar constructions formed like asbestos. This firm's graphite productions are black-lead crucibles and retorts, brazing crucibles, graphite boxes and covers, fine office and drawing pencils, colored crayons, lumber leads, felt erasive rubber, carburet of iron stove polish, pure flake lubricating graphite, special graphite No. 635, electrotyping graphite, hatter's lead, plumbago for shot polishing, plumbago for powder glazing, plumbago foundry facings, yacht plumbago for lubricating and smoothing bottoms of yachts, graphite waterproof grease for gears, wire ropes, hoisting chains and general machinery, graphite axle grease, better and cleaner than castor oil for trucks, wagons, carriages; graphited wood grease for use on trolley car gears which are inclosed in a gear case; graphited oil, graphite cup greases, oiled graphite, lubricating compound No. 688, silica-graphite paint, graphite pipe-joint compound, cycle chain graphites, graphitoleo, commutator graphite, anti-flux brazing graphite, crucible clay and graphite mixture, stove cement, traction belt dressing, solid belt dressing, graphite resistance rods, graphite products for electricians.

A SURE FOOTED HORSE.

"Is that horse sure-footed?" asked the prospective purchaser.

"Well, I guess yes," replied the owner. "He kicked my wife's mother three times in the same spot."—Ex.

BUSINESS CHANGES.

NEW FIRMS.

Waukesha, Wis.—The Perkins Hardware Co.
Mohall, N. D.—Ferguson Bros.
Meridian, Miss.—The Frank Smith Hardware Co.
International Falls, Minn.—Geo. H. Green.
Deerwood, Minn.—Chas. E. Benson.
Westbrook, Minn.—The Johnson Hardware Co.
Mapleton, Ia.—W. E. Allen.
Louisville, Ky.—Bridgeford & Co.
Mapleton, Ia.—J. R. Butler.
Treynor, Neb.—Hayes Bolton.
Tuscola, Ill.—Clarence Jessee.

CHANGES.

Algona, Ia.—King Bros. are succeeded by W. O. Jones.

Osceola, Ia.—Paxton & Peters succeed A. Paxton.

New Virginia, Ia.—I. M. Kingdom is succeeded by W. R. Mitchell.

Stanton, Ia.—Finley & McCormock are succeeded by Blade & Nelson.

Thayer, Ia.—J. A. Parsons succeeds R. J. Wilson.

Anita, Ia.—Suplee & Burkhart are succeeded by J. E. Bruce.

Blakesburg, Ia.—John La Follitte succeeds the Oswald Hardware Co.

Packwood, Ia.—Eicher & Meyers succeed the Packwood Hardware Co.

Bradley, S. D.—Carlson & Swanson will discontinue.

Parker, S. D.—Roper & Morgan Hardware Co. succeeds M. S. Clark.

Oldham, S. D.—A. Simonson & Co. are sueceeded by A. L. Hanson and his brother, Paul Hanson.

Washtucna, Wash.—Watson & Smith are succeeded by Geo. E. Young.

South Bend, Wash.—George W. Myers is succeeded by Fenton Smith.

Pomeroy, Ia.—Tall & Merrill are successors to Breiholz & Behrends.

Dundee, Minn.—E. S. Humble is succeeded by S. H. Nelson.

W. Duluth, Minn.—Wieland & Wade are succeeded by Schell & Wade.

St. Peter, Minn.—Peter Meisin & Son succeed Paul Guertin.

Marion, Ky.—Cochran & Pickens succeed Cochran & Baker.

Kissimmee, Fla.—Graves & Graves succeed the W. B. Macksinson Co.

Vesta, Minn.—A. E. Athey is succeeded by W. J. Barber.

Ormsby, Minn.—Sweet & Son are succeeded by Martin Stenberg.

Leroy, Ia.—O. E. Carlton is succeeded by H. R. Leach.

Thayer, Ia.—R. J. Wilson is succeeded by E. H. Baxter.

Rippey, Ia.—F. B. Myers & Co. are succeeded by E. A. Shaw.

Footville, Wis.—L. Klutt is succeeded by Frank Lowry.

Hill City, S. D.—George W. Coats is succeeded by Coats & Roland.

Maybe, Mich.—Henry Kohler is succeeded by the Longprey Hardware Co.

Napoleon, Ia.—The Frederick Hardware Co. are succeeded by Fred Badenhope.

Bloomfield, Neb.—H. Blanchard is succeeded by Leach & Gossard.

MISCELLANEOUS.

Hartland, Minn.—P. H. Donavan is closing out his hardware stock.

Eldorado, Wis.—A. Hellman & Son are contemplating selling out.

Marion, N. C.—The Thomas & Price Hardware Co.; fire loss.

Garfield, Wash.—The Garfield Hardware & Mercantile Co. have commenced work on their new brick building.

Spokane, Wash.—Holley, Mason, Marks & Co., are about to erect a six-story warehouse and wholesale establishment to cost $125,000.

Sedro-Wooley, Wash.—Fritsch Bros.; burglarized.

Monett, Mo.—E. J. Gibbons, of Shaw & Gibbons, is dead.

Ardmore, I. Ty.—Weeks Bros.; fire loss.

STOPPAGES.

Aurora, Ia.—Levi Leach has gone out of business.

Sisseton, S. D.—J. M. Ness has made an assignment.

Bemidji, Minn.—G. M. Malzen & Co. are about to close out.

Burt, Ia.—Mr. Warden has sold out his stock of hardware.

Lead, S. D.—John D. Patton is closing out.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

C. C. Caldwell has an interesting ad which at the time of its appearance was unusually timely. The idea of advertising a single specialty is an excellent one, but we think the ad would have been improved, if instead of starting out with the word "hardware" and then switching to the eccentricities of hens, the announcement had started with a reference to the high price of hens, and at the lower part of the advertisement, the sentence, "we carry a full line of hardware" or something to that effect was used.

HARDWARE!

HENS

are on their annual strike.

EGGS

are scarce and high in price.

Now is the time to feed oyster shells and poultry feed. This is headquarters for both. We sell Dr. Hess & Clark's Poultry Pan-a-ce-a under a positive guarantee to increase egg production. If not, your money refunded.

We sell same brand of stock food under an equally strong guarantee.

C. C. CALDWELL.

Phones, 212—312.

The advertisement of H. J. Hendricksen suffers from the use of archaic type. Then, too, there are too many styles of type in this advertisement. There is no particular point in the headline, and the cut is a decidedly poor one. This ad. is susceptible of very general improvement.

Don't Run, but Take Long Steps

TOWARD

H. J. HENDRICKSON'S

HARDWARE,

And see a complete line of

Riding and Walking Plows,

Discs, Drags, Seeders, Corn Planters, Corn Sulkies Etc.

The advertisement of Lofthus & Lofthus is decidedly above the average as their announcement of a radical cut in hardware prices should bring them more or less business. However, we realize this advertisement would be rendered greatly more attractive if some instance of the prices they were cutting were given. For instance, a hardware dealer could fill three or four pages of a country paper with announcements that he was sacrificing profits and was cutting prices, selling goods below cost, etc., and all this would not have the effect on his trade as the simple announcement "that he had 2,000 full kegs of nails in his store which he was willing to sell while they lasted for a dollar a keg." This price would be the most effective argument a man could make to prove that he was selling goods below cost.

A Whole Load

of seasonable things can be purchased here for a small sum. We're going to unload a lot of

Hardware

that we won't carry over. Prefer to turn it into cash.

Two reasons for this. We want room and we want money. Sacrificing profits to secure both. Cutting prices on sharp cutters here. Sparing nothing in order to start the coming season with a clean slate. Come and look over the bargains.

YOURS FOR BUSINESS,

LOFTHUS & LOFTHUS

The advertisement of H. S. Graham, Delhi, N. Y., is an excellent one, and the point of quality made is exceptionally well attempted. The suggestion may be made, however, that in addition to the line "if you buy the wrong kind you have a trouble that lasts a long time," the line should be added, "or else some cheap contraption which lasts no time at all."

Hardware

The essential thing about buying hardware is to know that it is good. You don't buy it with the same frequency that you buy groceries, and if you buy the wrong kind you have bought a trouble that lasts a long time. The least skillful buyer can buy here and be sure that what has been bought is good.

[illegible] our stocks [illegible] everything that should be found in an up-to-date hardware store.

H. S. GRAHAM,

DELHI, NEW YORK.

Heating and Ventilating

R. D. Hocking is a new plumber and gas fitter located at 645 West Sixty-ninth street, Chicago.

Harris & Co., Philadelphia, Pa., have received the contract for heating thirty-three buildings at Fortress Monroe, Va. Their bid for this work was $25,349.

Chas. A. Boynton is president, Jay B. Crawford is treasurer and Henry E. Ruggles is clerk of the Atlantic Stove & Mfg. Co., Boston, Mass., incorporated with a capital stock of $350,000.

Tunison Fulkerson, Claude W. Fulkerson, Edith A. Fulkerson, Nina E. Fulkerson and John M. Sourwine are the incorporators of the Superior Heating Co., Los Angeles, Cal., capitalized at $25,000.

The supervising architect, Treasury Department, Washington, D. C., will receive bids until Nov. 17th, for a low pressure steam heating apparatus for the United States Post Office at Lockport, N. Y.

John Palmer, who is well known to the trade, having been associated with Domestic Engineering for a number of years, was honored by the British Institution of Heating and Ventilating Engineers at their autumnal meeting at the Holborn Restaurant, London, Oct. 6th last, by being unanimously elevated to the presidency of that important body.

A. B. Reck, Copenhagen, Denmark, has invented a hot-water heating system worked by steam. The object is to create means for attaining this by only changing the load on the pressure-regulator that controls the pressure of the steam. The hot-water system can be worked in two distinctly different manners, one for low and the other for high temperature on the water.

Robert Thurston, director of Sibley College, the mechanical department of Cornell University, died of heart disease on Oct. 26th at his residence in Ithaca, N. Y. Prof. Thurston was the first president of the American Society of Mechanical Engineers. He was a liberal contributor to the scientific press, and was the author of a number of standard technical works.

Reports from Sofia tell of a recent plan on the part of the Macedonians to kidnap Charles R. Crane, vice-president of Crane Company, of Chicago, who has been traveling in Bulgaria in company with Prof. Milyoukov, of the University of Chicago. Sarafoff's insurgents intended to hold him as a hostage in the hope that the United States government would interfere in favor of Macedonia.

W. M. Kingsbury, for a number of years manager of the heating department of the Prizer-Painter Stove & Heater Co., 717 Grant St., Pittsburg, Pa., has left that concern to look after his interests with the Liberty Supply Co., of Waynesburg, Pa. This last concern are engaged in the heating contracting business, and Mr. Kingsbury will be glad to receive literature concerning steam and hot water boilers.

THE AMERICAN SOCIETY OF HEATING AND VENTILATING ENGINEERS.

The Tenth Annual Meeting of The American Society of Heating and Ventilating Engineers will be held at 12 West Thirty-first street, New York, in the rooms of the American Society of Mechanical Engineers, on January 19th, 20th and 21st, 1904.

This meeting being the tenth anniversary of the society will be made an especially interesting one by a special committee appointed for that purpose.

QUAKER FURNACES.

The Quaker Manufacturing Co., Chicago Heights, Ill., send us a circular calling attention to their 400 Series Quaker furnace for wood, hard coal and soft coal and coke. It is a heavy steel furnace having a single shell of ⅛-inch mild steel encircling the fire box, combustion chamber and ash pit. The dome is made of 3-16-inch steel, dished and flanged, and riveted in, making it perfectly air tight. The fire box is of steel, lined with fire brick in sections. The automatic puff damper is so hinged as to remain closed, but if there is an explosion of gas, instead of blowing open the door, this damper opens, permits the escape of the gas, then closes itself. This is a splendid arrangement in burning soft coal. The combustion chamber is large, and as the products of combustion escape from the fire box they first come in contact with the dome and upper portions of the heating surface, and then pass downward into the narrow space between the fire box and vertical steel heating plate at the lower part of the furnace. As the cold air enters the air-warming chamber at the bottom it comes first in contact with the lower portion of the heating plate. Thus the products of combustion always make their last run in close contact with steel that is acted upon by the coldest air, preventing waste of heat. The ash door is elevated so that the furnace can be placed six inches lower than the level of the basement floor and can therefore be placed in a very low basement. The grates are strong, durable, simple, triangular rocking and clinkerless. They work in pairs and are easily removed, one grate at a time. They are shaken from the outside without opening the ash door. Another special feature of the Quaker steel furnace is the basket grate. The basket grate allows more air to pass into and through the fire when the draft is on and absolutely prevents the formation of clinkers on the sides of the fire brick. The ash box has but one opening. The doors are carefully fitted up with ground joints so as to be air tight when closed and control the fire in the mildest weather. The draft is regulated by a chain attached to a small lever, which holds the ash door open just far enough to give the required draft. This places the fire always under control from the rooms above. A hot air blast which enters at the lower part of the furnace, extending up to the top of the fire pot, there delivering the air hot enough for combustion. This ignites with the gases and soot and consumes them in the fire chamber, thus preventing waste and preventing the cistern water being polluted by the soot on the roof. The Quaker water heater is put in the fire pot in place of a section of the brick lining. The capacity of the water heater is, as desired, to heat from one to six rooms, the furnace being a base burner the heat is on both sides of the water heater, thus making a powerful heater. The fire pot is perfectly straight. A large combustion chamber

insures thorough combustion of smoke and gases. It has an immense vertical heating surface. The heat is equally distributed over all the heating surface. One of these circulars will be sent to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

COMBINATION HEATING.

The accompanying illustration is one used by the Chas. Smith Co., Chicago, to exemplify the utility of combination heating.

The twelve-room residence shown is heated by a combination of hot water and warm air heating.

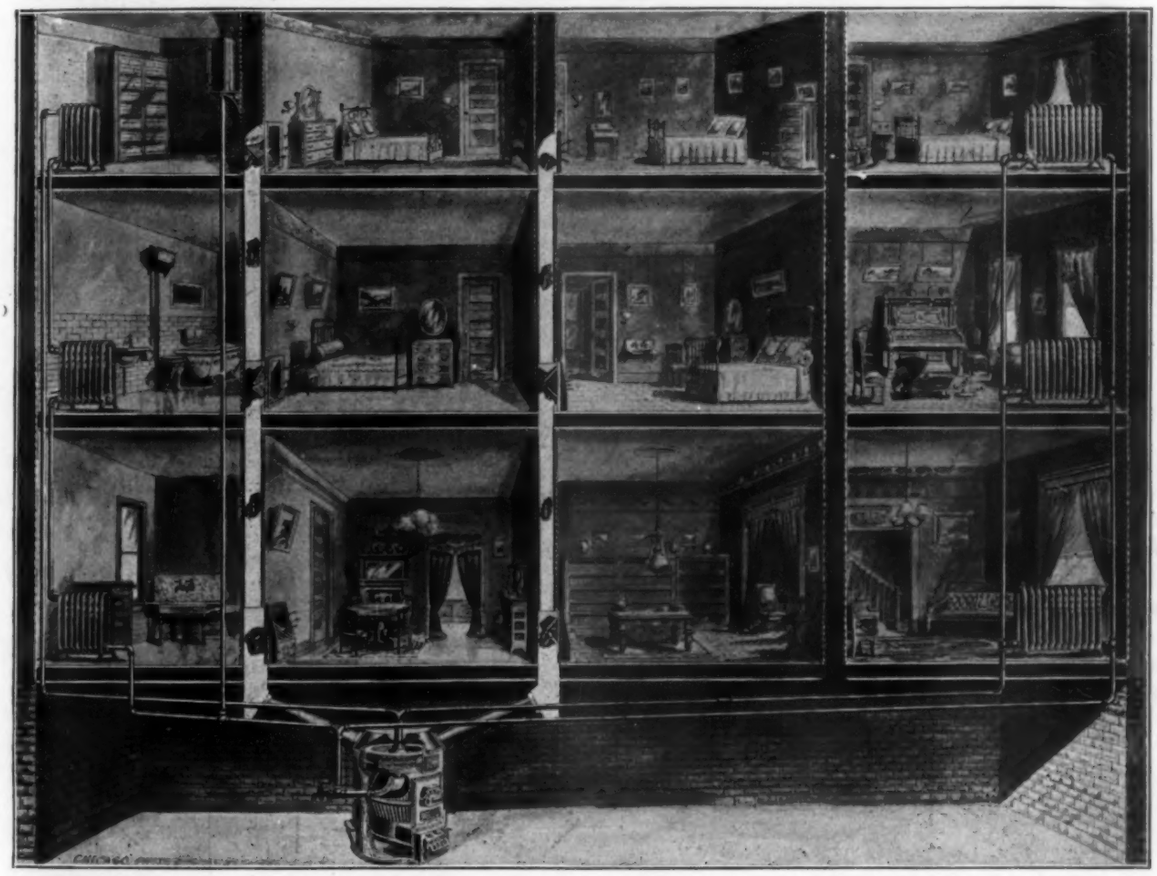
Each of the radiators in the three front rooms are supplied with valves so that a part or all of the heat can be shut off from one or all of the three radiators.

The three radiators in rear of house have the overhead system. The supply pipe runs from furnace to top of highest radiators, and from the bottom of this radiator to the top of the radiator on second floor, and in the same manner to radiator on first floor, and back to furnace.

The expansion tank is placed on third floor above the level of the highest radiator, and is connected to the return pipe in basement.

The six middle rooms are heated in the most modern way with side wall registers.

The cold air ducts and ventilating flues are concealed.



Combination Heating.

THE HOMES SUCCESSFUL.

The American Radiator Co., Lake and Dearborn streets, Chicago, send us a very dainty booklet on the subject of heating, styled "The Homes Successful." This book is replete with interesting cuts, and in a graphic manner runs the gamut of the heating question. The primitive fire in Visi Gothic cane, the open fireplace, Egyptian stoves, all are shown, Who does not appreciate the dry humor of these lines:

Summer Visitor—"You must take lots of comfort in winter from that great fireplace."

Countryman—"Wal, you see we don't hev much time; I'm busy chopping wood for it most of the time; an' Johnny, he's busy lugging it in, an' ma, she's busy puttin' it on the fire."

The merits of steam and hot-water heaters are carefully pointed out. The illustrations and data in this volume will prove invaluable in assisting dealers in educating their trade on the points of various heating systems.

CHIMNEY WITH BACK DRAFT.

TO THE AMERICAN ARTISAN.

How can I remedy chimney that has back draft. I inclose a sketch of two chimneys in a church that do not work at times. The size of flues in basement are 9x16 and on top of building two bricks one way by eight bricks the other way, with a 4-inch partition in center where they meet at arch. The chimney is built in north wall of church. "C. F. L."

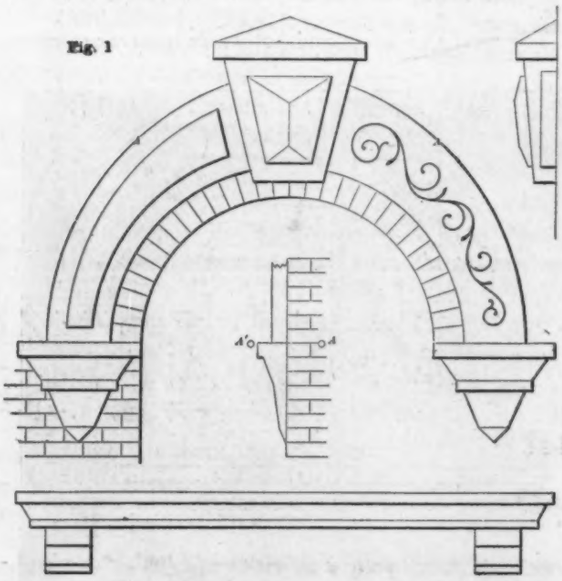
Frankenmuth, Mich., Nov. 2, 1903.

Tinshop

SHEET METAL WORK ON BUILDINGS.

In many towns a few brick buildings are put up by ordinary contractors and brick layers without consulting architects. Little or no attention is made to ornamental features in their construction, and a tinner with taste and ingenuity, coupled with energy, has an opportunity to build up quite an addition to his business by supplying window caps, cornice, etc., which will

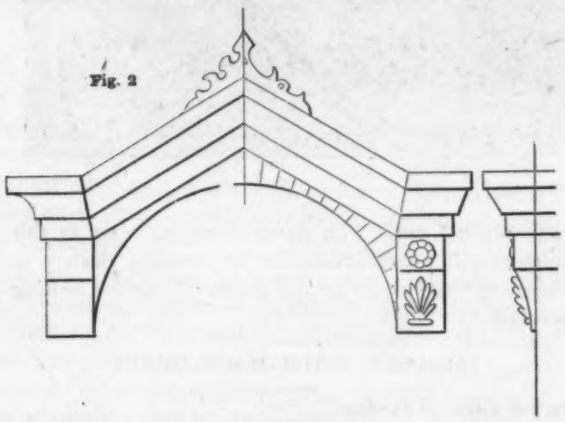
Fig. 1



add much to the apearance of a plain brick building, and thus enhance its value.

Sheet metal window caps can be made so as to be nailed to the brick work, being made two or four inches larger on either side than the opening, so as to avoid having the iron run back to the wooden frame. If the caps are put on as the building is being erected, it is no

Fig. 2



trouble to have the inside of the cap extend back so as to be nailed to the outside of the window frame and the space between filled in with brick. There are so many styles of caps that have very little work on them that requires a cornice brake, and in those that do the joints are so short that, if light iron is used, the bending could be done over a corner of a bench that is faced with iron or steel, as at least one bench should be in every shop. The iron can be held in place while bending by using clamps, such as are used by wagon makers. To make a molding the next step is to bend the iron over a wooden or iron former, which can be fastened to the bench in any convenient way. I have seen good moldings for a canopy over a range made in an ordinary tin shop.

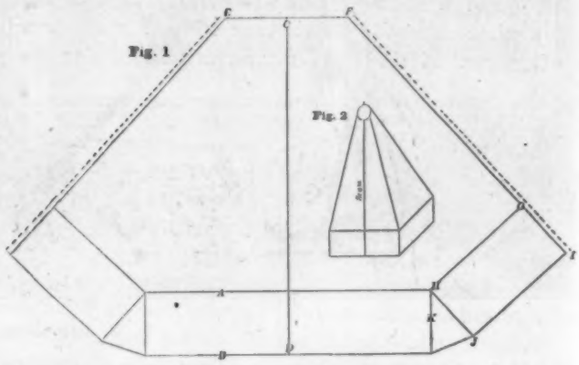
A number of designs of window caps and sills are given, such as require little forming or brake work, yet they are ornamental enough for most buildings, and more so than many made of stone, while they can be made much cheaper and yet afford a handsome profit to the maker. The designs given are drawn to the scale of three-fourths of an inch to one foot. The top of the sills should extend back under the window frame so as to keep out the water.

Fig. 1 This cap can be made without a keystone and yet look well. The side A has a panel raised about one inch. The piece for the panel is cut out and a strip soldered on and then joined to the cap. The other side A is intended to be of plain iron and ornamented with a scroll, behind which fine wire netting can be soldered. To describe the outer segment A, the dividers are set at A and for A at A. Side views are given of the drops and keystone.

Fig. 2 is a cap that can be used for almost any kind of a window, square, segment or half circle top. Two styles of moldings are given. This cap can be greatly improved by the addition of stamped leaves and a top ornament.

CHIMNEY CAP.

To make a chimney top to fit a chimney 16"x20", and taper to 7" pipe or any other size: Draw the lines A B parallel, four inches apart and sixteen inches long.



Erect the line C D through the center of A B, and draw line E F one-half the circumference of a seven-inch pipe. Lay the point of the square on G ten inches from H, and draw line H G and G E. Now let the square down four inches to I, and draw line from G I J. Then cut out this piece, which is one-half of the chimney. Cut in from J to H, and leave the pieces on that are marked K for lap. Take the single bead and run it around on line marked L A H G. Of course, allow for locks on the dotted lines, and form up to make round at top and square at base.

A COLOSSAL MERGER.

It is said that the American Tin Plate Co. and the American Sheet Steel Co. will shortly be merged.

SHEET METAL MACHINERY.

Geo. C. Keene & Co., Cincinnati, O., are well known to the trade as extended manufacturers of cornice brakes, presses, dies, shears, forming tools, crimpers, corrugators, flanging machines, etc. The accompanying cut gives a glimpse into their factory, which is 100x100 feet in dimensions, and, as can readily be seen, is provided with the latest and most up-to-date mechanical equipment. This firm have established a deserved reputation for progressiveness. They realize that the rapid recent development in the manufacture of cornice and roofing has rendered many machines that until quite recently were held in high esteem comparatively out of date, and have consequently shown tremendous energy of late in bringing out new and improved designs.

Glimpse of Keene's Sheet Metal Factory.

GETTING THE RAISE OF AN ELBOW.

To The American Artisan.

Will some of the craft kindly give through your valuable paper a short, simple and practical method of getting the raise of a 3 and 4 piece elbow of any size from 6 to 20 inches? "D."

Millbank, S. D., Nov. 1, 1903.

NOTES AND QUERIES.

DRUGGISTS' BOXES.

From "Reader," Memphis, Tenn.

Would like addresses of manufacturers of druggists' boxes?

Ans.—L. H. Baldwin, 40 Prince St., New York; Mary Beggs, 161 Water St., New York; Bogert & Hopper, 162 William St., New York; Wm. J. Chessbro, Knox, N. Y.; Dennison Mfg. Co., 26 Franklin St., Boston, Mass.; E. B. Estes & Sons, 45 John St., New York; Jess Jones & Co., 615 Commerce St., Philadelphia, Pa.; Bernard Meyer, 151 Chambers St., New York; National Folding Box & Paper Co., New Heven, Conn.; John A. Pierce, 343 Fourth Ave., Pittsburg, Pa.; G. W. Plumby, 213 N. 4th St., Philadelphia, Pa.; Randolph Paper Box Co., Richmond, Va.; J. B. Stevens & Son, Rochester, N. Y.; Tablet & Ticket Co., 87 Franklin St., Chicago, Ill.; J. A. Ward, Buffalo, N. Y.

FURNACE CASING RINGS.

From Chas. Smith Co., Chicago.

Who makes furnace casing rings?

Ans.—Walworth Run Fdy. Co., Cleveland, O.; Geo. Auer, Toledo, O.

TOY STOVES.

From the Barnes & Nuss Co., Grand Forks, N. D.

Where can we buy toy stoves?

Ans.—A. C. Williams, Ravenna, O.; the Fanner Mfg. Co., Cleveland, O.; Logan & Strowbridge Co., New Brighton, Pa., and J. & E. Stevens Co., Cromwell, Conn.

WOLFF GAS RADIATOR.

From New Orleans Roofing & Cornice Co., New Orleans, La.

Who manufactures the Wolff gas radiator?

Ans.—A. H. Wolff, 14 Wooster street, New York, N. Y.

STEEL STEAM YACHTS.

From J. L. Johnson, Chicago.

Would like addresses of manufacturers of steel steam yachts?

Ans.—Detroit Boat Works, Detroit, Mich.; Detroit Dry Lock Co., Detroit, Mich.; Herreshoff Mfg. Co.,

Bristol, R. I.; Manhattan Machinery Co., 95 Liberty St., New York, N. Y.; N. Y. Yacht, Launch & Engine Co., Morris Heights, N. Y.; Racine Boat Mfg. Co., Racine, Wis.

PEA HARVESTERS.

From B. Martin, Iola, Ill.

Who makes a pea harvester?

Ans.—Chisholm-Scott Co., Suspension Bridge, New York.

LAMP SHADES.

From J. M. Smyth, Pasadena, Cal.

Where can I buy lamp shades?

Ans.—Dithridge & Co., Pittsburg, Pa.; Thos. Evans Co., Pittsburg, Pa.; Gillinder & Sons, 135 Oxford St., Philadelphia, Pa.; Mt. Washington Glass Co., New Bedford, Mass.; J. J. Murray & Co., Trenton Ave., Philadelphia, Pa.; Phoenix Glass Co., 15 Murray St., New York; Rochester Lamp Co., 35 Barclay St., New York; Geo. N. Seaman & Co., Boston, Mass.; Smith Bros., New Bedford, Mass.

ITEMS.

Otis Smith is a new Aitkin, Minn., tinware dealer.

Fell & Fobere are succeeded in the tinsmithing business at Malone, N. Y., by E. L. Fell.

The Wilson Enameling & Plumbers' Supply Co., of Allentown, Pa., will shortly erect a plant in that city.

It is said that the American Tin Plate Co. have secured a Canadian contract for 150,000 boxes of tin plate.

Six additional hot mills were placed in operation at the Elwood, Ind., plant of the American Tin Plate Co. on Nov. 1.

Twenty tin mills at the Shenango plant of the American Tin Plate Co., New Castle, Pa., resumed operations recently.

The finishing department of the Anderson, Ind., plant of the American Tin Plate Co., closed down on Oct. 27th last.

Mannen & Esterly, Cleveland, Ohio, tinsmiths, are making important additions to their headquarters in that city.

W. B. Chamberlain & Co., who recently purchased the tinsmithing business of Davis & Wright Co., Keene, N. H., have in turn sold out to Pearson Bros.

The Clayton & Lambert Mfg. Co., Detroit, Mich., manufacturers of tinners' furnaces, and torches, hose menders, etc., have increased their capital stock from $50,000 to $100,000.

John E. Wright has resigned his position as president of the La Balle Iron Works, Wheeling, W. Va. He is succeeded by John A. Topping, formerly first vice-president of the American Sheet Steel Co.

Murphy & Mercer Co., Philadelphia, Pa., tin plate merchants, have secured the services of William T. Lum, who will represent them in Ohio, West Virginia and Michigan, with headquarters at Columbus, Ohio.

The Independent Sheet Manufacturers' Association held a meeting at the Hotel Henry, Pittsburg, on Oct. 27th last, and discussed the question of limiting the output in union sheet mills and also the limit of time. A resolution was passed asking that the president of the Amalgamated Association of Iron, Steel and Tin Plate Workers should at once take steps to have the limit of output in union sheet mills removed.

J. H. Jones, president of J. H. Jones & Son, Streator, Ill., manufacturers of metallic skylights, incubators and contractor for steam, hot-water and furnace heating, has just left for a six months' trip to the Pacific coast for his health.

The stockholders of the Standard Tin Plate Co. held a meeting in East Canonsburg, Pa., recently and voted to bond the plant to the extent of $200,000, in order to enlarge the works, and furnish a sufficiently large working capital.

The McKeesport Tin Plate Co., McKeesport, Pa., are running their plant in full operation, with every department working triple time. Thus the company have enough orders on their books to keep the plant running until after the first of the year.

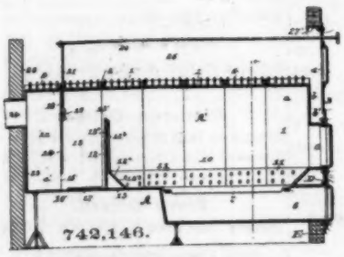
The Avery Stamping Co., Cleveland, O., send us a circular calling attention to the fact that they can do anything in the line of heavy pressed metal work. This also shows "Never-Break" steel gear shield casings, steel cylinder or boiler heads, heavy tinned steel soda tanks and heads, intricate hydraulic forgings, etc.

It is said that the Whitaker Iron Co., the Wheeling Corrugating Co. and the Laughlin Nail Co., all of Wheeling, W. Va., and the Portsmouth Steel Co., of Portsmouth, Ohio, will shortly consolidate, with a capital stock of $10,000,000. These firms make open hearth steel, sheet bars, charcoal blooms, steel sheets, black sheets, galvanized sheets, tin and terne plates, nails, etc.

The Carnahan Stamping & Enameling Co., Canton, O., are making a number of desirable specialties for the trade, including their Servian and ivory granite ware. The Servian ware is an enameled ware of superior quality, which has the effect of old polished copper in appearance. The ivory granite ware is double coated and is quite attractive. They also make a line of galvanized ware, including wash boilers, garbage and ash cans, oval foot baths, and oily waste cans. J. E. Carnahan is president of this company, W. M. Blecker is first vice-president, H. C. Milligan is second vice-president, M. F. Taylor is secretary and treasurer, and E. N. Langenbach is general manager. This firm are equipped with their own sheet and tin plate mills, and have stamping, galvanizing and enameling plants of the most modern and improved type.

Joseph Clarke is president, G. F. Sexauer is vice-president, S. J. Lennon is secretary and treasurer, and Henry Hallauer is treasurer of the recently organized Badger Steel Roofing & Corrugating Co., La Crosse, Wis. Jos. Clarke is secretary of the La Crosse Plow Co. and is also identified with Lloyd & Clarke, wholesale hardware dealers. G. F. Sexauer has been on the road for Hibbard, Spencer, Bartlett & Co., Chicago for a number of years. H. Hallauer is owner of the Wisconsin Pearl Button Co. S. J. Lennon has been identified with the La Crosse Steel Roofing & Corrugating Co. for the past seven years. This company will manufacture galvanized eaves trough and conductor pipe, roofing and siding of all kinds, elbows, cornices, miters, ends and drops, conductor hooks, cut offs, finials, skylights, roof gutters, ornamental steel ceilings, galvanized steel tanks, etc.

NEW PATENTS.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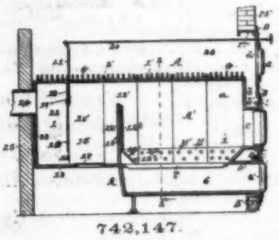
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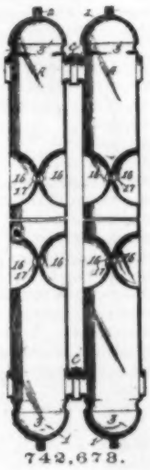
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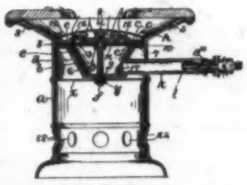
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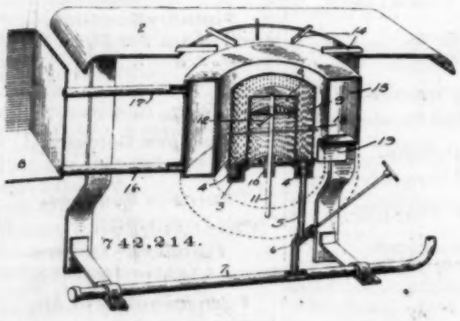
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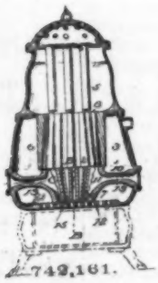
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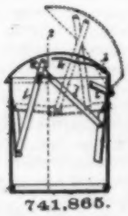
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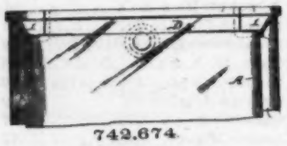
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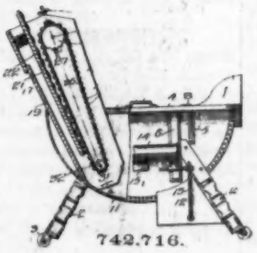
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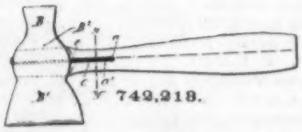
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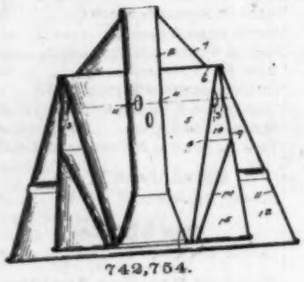
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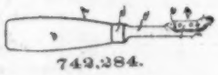
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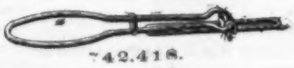
742,418.

742,146—Warm air furnace. Oliver L. Badger, Pittsburgh, Pa.

724,147—Warm air furnace. Oliver L. Badger, Pittsburgh, Pa.

742,214—Attachment for blue flame oil stoves. Charles F. McKay, Minneapolis, Minn.

742,643—Heating and Cooking Stove. John Harris, Cleveland, Ohio.

742,161—Downdraft stove. Edwin R. Cahoone, Troy, N. Y.

739,938—Water heater. Rose Smith, Cleveland, Ohio.

742,673—Sheet metal radiator. William R. Kinnear, Columbus, Ohio.

742,674—Tubular sheet metal radiator. William R. Kinnear, Columbus, Ohio.

742,754—Washington machine. James S. Trimble, Philadelphia, Pa.

742,716—Washing machine. Walter A. S. Murphy, Atchison, Kans.

741,865—Rural mail box. Benjamin B. Williams, Adrian, Mich.

742,371—Eaves-trough hanger. Harry E. Adams and James Mulvey, Ashtabula Harbor, Ohio.

742,213—Fastener for tool handles. James F. McCullum, New York, N. Y.

742,764—Compound tool. John F. Watermolen, Green Bay, Wis.

742,240—Wrench. William E. Seanor, Hope. Idaho.

742,640—Tool handle. James A. Harold. Cowen. W. Va.

742,638—Ratchet wrench. Paul Harding, Long Island City, N. Y.

742,418—Can opener. Robert O. Hammond, Buffalo, N. Y.

742,284—Tack-claw. William G. Browne, Kingston, N. Y.

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Stanley Rule & Level Co. 60
Stuber & Kuck 47
Tower Mfg. Co 55
Union Brick Bond Co 47
Weiss, H. & Co 52
White Mfg. Co. 56

Heaters—Gas.
Independent Register Co. 8

Heaters—Hot Water and Steam.
American Radiator Co. 2
Boynton Furnace Co 14
Detroit Heating and Lighting Co. 10
Hart & Crouse Co. 14
Kelsey Heating Co 13
Kewanee Boiler Co. 2
Magee Furnace Co 14
Monroe Foundry & Furnace Co. 12
Quaker Mfg. Co. 14
Smith, Chas. Co 10
Stanton Heater Co. 13
Stolz, Frank D 8

House Furnishing Goods
Briscoe Mfg. Co. 53
Enterprise Mfg. Co. of Pa. 63
Meyers, The Fred J., Mfg. Co. 53
Nat. Enameling & Stamping Co. 53
Sperry, D. R. & Co. 2
Stuber & Kuck 47

Household Specialties.
Cline, L. Mfg. Co 46

Knives.
Smith & Hemenway Co. 54

Lanterns.
Ham. C. T. Mfg. Co. 55

Lawn Sprinklers.
Smith & Hemenway Co. 54

Lighting Devices.
Acorn Brass Mfg. Co 56
Niagara Falls Acetylene Gas Generator Co. 56
White Mfg. Co. 56

Mail Boxes.
Canton Steel Roofing Co 16
Peck, C. H. Hdw. Co. 60

Metal Polish.
Hoffman, Geo. W. 49
Stevens, F. B. 49

Metals—Perforated.
Aitchison, The Robert Perf'd Metal Co. 46

Mop Pails.
Central Mfg. Co. 59

Oven Thermometers.
Helios-Upton Co. 49

Paints.
Buckeye Paint & Varnish Co. 56
Connors, Wm. Paint Mfg. Co 1
Dixon, Jos. Crucible Co. 46
Forest City Paint & Varnish Co. 56

Patents.
Peck, Hubert S. 45
Willson & Co., H. B. 59

Patterns—Elbows.
Gray, G. L. 47

Pattern Letters.
St. Louis Electrotyping & Fdy. Co. 46

Pencils.
Dixon, Jos. Crucible Co. 46

Punch—Hand.
Weiss, H. & Co 52

Radiators—Hot Water and Steam.
American Radiator Co. 2

Radiators—Stove Pipe.
Aeolipyle Company 16
Burton, The W. J. Co 8
Independent Register Co. 16
Rochester Radiator Co. 9
Wilmot Castle Co 9

Registers.
Auer Register Co. 17
Canton Steel Roofing Co. 16
Ferrosteel Co. 17
Hart & Cooley Co., The 17
Henry & Sheible Co 19
Mueller, L. J. Furnace Co. 17
Symonds Mfg. Co 17

Roofing.
Berger Mfg. Co. 51
Canton Steel Roofing Co. 14
Clark, Quien & Morse 51
Cortright Metal Roofing Co. 2
Eller, J. H. & Co. 50
Garry Iron & Steel Co. 51
LaCrosse Steel Roofing & Corrugating Co 51
Milwaukee Corrugating Co. 50
Osborn, The J. M. & L. A. Co. 47
Perkins, J. L. & Co. 1

Sandpaper Handles.
Reissmann, F. 46

Sash Balance.
Pullman Mfg. Co. 64

Saws.
Atkins, E. C. & Co. 64
Diamond Saw & Stamping Wks 61
Disston, Henry & Sons 60

Saw Sets.
Disston, Henry & Sons 60
Smith & Hemenway Co 54

Scales.
American Cutlery Co. 60
Osgood Scale Co. 1
Triner Scale & Mfg. Co 60

Screw Drivers.
Hurwood Mfg. Co. 60
North Bros. Mfg. Co. 56

Shovels.
Avery Stamping Co., The 61

Skylights.
Galesburg Cornice Works 51
Jones, J. H. & Son 2

Skylight Gearing.
Weiss, H. & Co. 52

Sporting Goods.
Bridgeport Gun & Implement Co. 2
Peters Cartridge Co. 2
Stevens, J. Arms & Tool Co 64

Steel—Sheet.
Sayre Stamping Co. 48

Stove Bolts.
Atlas Bolt & Screw Co. 1
Columbus Bolt Works 1

Stove Lining.
Connors, Wm. Paint Mfg. Co. 1
Bridgeport Crucible Co. 64
Morris, J. L., Stove Repair Co. 49
Williams Stove Lining Co. 49

Stove Patterns.
Cope, Geo. W. Pattern Works 48
Gobeille Pattern Works 48
Mersfelder Pattern Works 48
Milwaukee Pattern Works 48
Weller Pattern Co. 48

Stove Polish.
Black Silk Stove Polish Works 49
Dixon, Jos. Crucible Co. 46
Nickel Plate Stove Polish Co. 8

Stove Putty.
Connors, Wm. Paint Mfg. Co. 1

Stove Repairs.
Brauer, A. G. 48
Dust, Wm. T. Co. 48
Morris, John B. Foundry Co 48
Morris, J. L. Stove Repair Co 49

Stoves and Ranges.
Beckwith, Estate of P. D. 18
Belleville Stove Works 4
Brand Stove Co. 14
Champion Steel Range Co 8
Culter & Proctor Stove Co. 5
Faultless Mfg. Co. 3
Hess-Snyder Co., The 7
March-Brownback Stove Co. 2
Peerless Steel Range Co 6
Pittsburgh Stove & Range Co. 5
Royal Stove & Range Co. 6
Smith & Anthony Co. 8
Van, John Range Co. 7
Willard, Wm. G. 8

Stove Supplies.
Chicago Furnace Supply Co 14
Sayer Stamping Co. 48

Stove Trimmings.
Atlas Bolt & Screw Co. 1
Columbus Bolt Wks. 1
Helios-Upton Co. 49

Stove Trimmings—Con.
Howes, S. M. Co., The 48
Sayre Stamping Co. 48

Tacks.
Tower Mfg. Co. 55

Tape Measures.
Lufkin Rule Co. 60

Tinners' Tools and Supplies.
Berger Bros. Co. 58
Clayton & Lambert Mfg. Co. 47
Keene, Geo. C. & Co. 47
Lufkin Rule Co. 60
Perkins, J. L. & Co. 1
Sayre Stamping Co. 48
Smith & Hemenway Co 54
Stanley Rule & Level Co. 60
Swaine, Fred J. Co. 52
Weiss H. & Co. 47
Young Mfg. Co., The 51

Tinplate.
American Tin Plate Co. 47
Garry Iron & Steel Co. 51
Illinois Roofing & Supply Co. 64
McClure & Co. 64
Osborn, The J. M. & L. A. Co. 47

Tinware.
Cooney & Geiger 64
Ehle, F. G. O. Co 57
Nat. Enameling & Stamping Co. 53
Stuber & Kuck 47
Taege, Emil 59

Torches.
Clayton & Lambert Mfg. Co. 53

Tools.
Geneva Tool Co.
Hurwood Mfg. Co. 60

Ventilators.
Globe Ventilator Co. 64
Merchant & Co., Inc. 47
Pan-Coast Ventilator and Mfg. Co 47
Powers Bros. 1

Washers.
Columbus Bolt Works 1

Wash Boilers.
Moshiek, P. 53

Washing Machines.
Benbow-Brammer Mfg. Co. 59
Boss Washing Machine Co. 58
Brammer, H. F. Mfg. Co. 59
Gagan, J. M., & Co 54
Nineteen Hundred Washer Co. 58
Voss Bros. Mfg. Co. 59
White Lily Washer Co. 59

Water Supplies.
Horigan Supply Co. 55

Weaner—Colt, Calf, Cow.
Cooley, Randegger Mfg. Co. 54

Wrenches.
Hurwood Mfg. Co. 60

Wrenches—Miniature.
Davison Mfg. Co. 56

HE WAS CURED BY A LETTER.

A few months ago the son of a railway director was, through his father's influence, given a position of some importance on a large railway. He was fresh from Cambridge, and in the orders which he from time to time issued to the men under him always made use of the longest, most unusual words. This habit led to some rather expensive blunders and, the matter coming before the general manager, he wrote the young official the following letter:

"In promulgating your esoteric cogitations and in articulating your superficial sentimentalities and amicable philosophical or psychological observations, beware of platitudinous ponderosity. Let your conversational communication possess a clarified conciseness, a compacted comprehensibleness, a coalescent consistency and a concatenated cogency. Eschew all conglomeration of flatulent garrulity, jejune babblement and asinine affectation. Let your extemporaneous decantings and unpremeditated expatiation have intelligibility and veracious vivacity without rhodomontade or thrasonical bombast. Sedulously avoid all polysyllabic profundity, pompous prolixity, psittaceous vacuity, ventriloquial verbosity and vaniloquent vapidity. Shun double entendre, prurient jocosity and pestiferous profanity, obscurant or apparent. In other words, talk plainly, briefly, naturally, sensibly, purely and truthfully. Don't put on airs; say what you mean; mean what you say and don't use big words."

The young official took the gentle hint and changed his style.—Michigan Tradesman.

Trade Report.

CHICAGO IRON MARKET.

Consumers are still viewing the market with apprehension as to lower prices being made later on, and in consequence the actual orders booked last week were small and for early delivery.

Inquiries in hand, however, are somewhat larger, evidence that buyers are of the opinion that reductions, if any, to come will not be large.

The question as to when the turn will come has been put forth more frequently as prices gradually pass the cost of manufacture.

Consumers are still able to secure all the iron desired, both north and south, for early delivery and at prices satisfactory to them, as they expect to receive lower figures on each succeeding purchase.

BARS.

Iron and steel bars have created but little interest during this week. Demand keeps relatively the same level—being far below the capacity of mills—and prices are practically unchanged. Iron is held nominally at 1.45c Chicago, though on desirable business this could undoubtedly be shaded from 50 cents to $1 a ton. Specifications for steel come in slowly, consumers generally following the plan of sending in orders from week to week or month to month for their current requirements instead of making season contracts. Demand from warehouse stocks is moderately good. We quote mill shipments, carload lots, Chicago delivery: Iron, 1.45c to 1.50c; Bessemer steel, 1.76½c; angles less than 3x3, 1.86½c base; hoops, in lots of 250 tons and greater, 2.06½c; less than this amount, 2.16½c. Quotations from jobbers' stocks: Iron, 1.70c to 1.80c; steel, 1.90c to 2c; hoops, 2.30c to 2.40c; small angles, channels, tees, 2c rates.

BILLETS.

At a meeting of the leading steel and iron manufacturers they made a reduction of $4.00 on the price of billets, making the market price at $23 a ton. The official announcement of this reduction will be made to the trade the coming week.

STRUCTURAL MATERIAL.

There are possible concessions on Structural Material. Solid steel has been sold at $2 a ton below market price by the independent interests. Fifty thousand tons of Alabama pig iron is now being figured on for British ports. A 15,000-ton sale of Gray Forge was made at $8.50 at furnace for export at the rate of $3.00 a ton from Birmingham. Another sale was of 10,000 tons on No. 3 foundry. The lifting of accumulated stocks for the domestic market is expected to strengthen the southern situation and has already done so to the extent that leading interests are not willing to sell for delivery into next year at prices recently named on prompt business. In the last week No. 2 foundry iron has sold at $9.50 Birmingham. Thirty-one furnaces in Ohio and western Pennsylvania are now idle. As yet northern foundry furnaces have not met the low prices of southern producers and are therefore booking little business.

MERCHANT STEEL.

Implement and carriage manufacturers have been doing some good buying this week and mills report that specifications are being received in satisfactory volume. Prices are without change and we quote Chicago delivery as follows: Spring steel, 2.65c to 2.75c; sleigh shoe, 1.95c; flat sizes, concave and convex, 2.25c; cutter shoe, 2.50c to 2.60c; machinery steel, 2.15c to 2.25c base; plow steel, 2.50c and upward, according to quality; toe calk, 2.35c to 2.45c; out of stock, 3c to 3.10c; ordinary tool steel, 6c to 7c; special, 13c and upward; less than carload lots, 5 and 10 per cent higher; cold-rolled shafting, carload lots, 47 per cent off; less than carload lots, 42 per cent off.

PLATES.

A fair number of orders are reported to have passed through the warehouses, most of which were small lots. Mill business is unusually quiet. We quote mill shipments, Chicago delivery: Tank steel, ¼-inch and heavier, 1.75c; flange steel, 1.85c. On lots from jobbers' stocks we quote: Tank steel, ¼-inch and heavier, 1.90c to 2c; 3-16, 2c to 2.10c; No. 8, 2.10c to 2,20c; No. 10, 2.20c to 2.30c; flange steel, 2.25c to 2.40c, all f. o. b. warehouse.

RAILS AND TRACK SUPPLIES.

Business has been quiet in this line for the past week and devoid of contracts for large tonnages. Though official prices are still quoted as before, there is a feeling among buyers that these prices cannot long be upheld in the face of competition of independent mills, if indeed they are being upheld at the present moment. We quote as follows for shipment from mill in car lots: Standard Rails, $28 to $30; Standard, second quality, $27 to $29; Light Rails, 25 to 12 lbs., $32 to $35; Angle Bars, 1.90c to 2c; Spikes, 2c to 2.10c; Track Bolts, 3½x3¾ inches, 2.75c to 2.85c, with 15c advance for Hexagon Nuts.

SHOVELS AND SPADES.

The dissolution of the association of the manufacturers of shovels and spades may alter the prices, but it is too soon to know the extent, as the manufacturers have not declared themselves on this point. It is not anticipated, however, that there will be any very radical change at present, but what the competition between the manufacturers will develop remains to be seen. In a market in which the capacity for producing goods is largely in excess of the requirements of the trade, it is to be anticipated that in the struggle for business low prices will develop. On some of the lines most largely

sold existing prices are, however, uncomfortably near the cost of production.

FORKS.

Forks are quoted at the following discount: Coal, 40 per cent; Coke, 40 per cent; Cotton Seed, 40 per cent; Ore, 40 per cent.

WIRE NAILS.

Wire nails remain as last week, showing no inclination forward or backward. Business is satisfactory in volume, even though it consists of a multitude of small specifications. Sales are being made at $2.15 to $2.20 in carload lots, f. o. b. Chicago.

BARB WIRE.

Nothing more could be expected at this season than a drop in Barb Wire sales. Prices are maintained without noteworthy exception. Galvanized Wire is selling on the basis of $2.75 to $2.80 in carload lots, and Painted at $2.45 to $2.50. For small lots 5 to 10 cents extra is charged. Staples in carload lots sell as follows: Plain, $2.30 to $2.35, and Galvanized, $2.70 to $2.75.

SMOOTH FENCE WIRE.

The demand for Smooth Fence Wire is in good way and most of the plants are using their full capacity. The market remains steady in tone without change in prices, which are as follows: Nos. 6 to 9, $2.05 to $2.10 in carload lots on track, and $2.15 to $2.20 in less than carload lots from store; Galvanized, 30 cents extra for Nos. 6 to 14, and 60 cents extra for Nos. 15 and 16.

CARRIAGE AND MACHINE BOLTS.

This is a line of goods in which for some time there has been a downward tendency, and as a result what might be termed regular quotations have become quite nominal as concessions are readily, if not regularly, obtained. The result is that the low prices which are obtainable are proving attractive to some buyers, and there is accordingly a tendency toward the placing of more liberal orders.

COPPER.

Copper base is quoted at 22c.

AUGERS.

Vaughan's 4 to 9 inch post-hole augers are quoted at $6.50 per doz.

BOLTS.

Carriage bolts, ⅜-inch and smaller, are quoted at 70, 10 and 5 per cent; 7-16-inch and larger are quoted at 70 and 10 per cent. Machine bolts are quoted at 70 and 10 per cent.

CLEVISES.

Malleable clevises are quoted at 3¾c per lb.

HOOKS.

Seat spring hooks are quoted at 5½c per lb.

PINS.

Picket flutted pins are quoted at 80c per doz.

SCRAPERS.

Triangular box scrapers are quoted at $2.50 per doz.

SINKS.

Painted cast iron sinks are quoted at 50 and 5 per cent; enameled, white, are quoted at 60, 10 and 5 per cent.

SWIVELS.

Malleable iron swivels are quoted at 6c per lb. Wrought steel swivels are quoted at $4.50 per gross.

WASHERS.

Wrought iron washers are quoted per lb as follows: ¼-inch, 8c; 5-16-inch, 7c; ⅜-inch, 6⅛c; ½-inch, 4¼c; ⅝-inch, 4c; ¾ to 1 inch, 3¾c.

Wrought steel washers are quoted per lb as follows: ¼-inch, 9c; 5-16-inch, 8c; ⅜-inch, 7⅛c; ½-inch, 5¼c; ⅝-inch, 5c; ¾ to 1 inch, 4¾c.

WEIGHTS.

Sash weights are quoted at $22.50 per ton, f. o. b. Chicago.

WRENCHES.

Malleable "S" and malleable wrenches are quoted at 5½c per lb.

LINSEED OIL.

On October 30 city crushers reduced the price of Raw Oil, in lots of 5 barrels or more, to 37 cents, and in lots of less than 5 barrels, to 38 cents per gallon. Out of town and Western Oil is quoted at 35 cents per gallon. Probably an advance of a cent per gallon would be asked in less than 2 or 3 barrel lots. The reduction in price has not improved demand, which continues of a hand to mouth character.

SPIRITS TURPENTINE.

On November 3 Spirits advanced ¾ cent per gallon, at Savannah, which gave the local market a firmer tone. The freight handlers' strike is interfering with the movement of Turpentine from Savannah, and the local market is depending upon Wilmington almost entirely for supplies. The market is firm at the following quotations, according to quantity: Oil barrels, 60 to 60½ cents; machine barrels, 60½ to 61 cents per gallon.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x14	$10 25
IC	14x20	7 25
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 60
IXXXX	14x20	12 85
IC	20x28	14 25
IX	20x28	16 55
IXX	20x28	18 95
IXXX	20x28	21 50
IXXXX	20x28	23 85

COKE PLATES.

Cokes, 180 lbs	IC	20x28	8 85
Cokes, 200 lbs	IC	20x28	9 05
Cokes, 216 lbs	IC	20x28	9 45
Cokes, 216 lbs	IX	20x28	11 65

PIG IRON.

Lake Sup. Charcoal	$17 00@$18 00
Local Coke Fdy No. 1	16 00@ 16 50
Local Coke Fdy No. 2	15 50@ 16 00
Local Coke Fdy No. 3	15 00@ 15 50
Local Scotch Fdy No. 1	16 00@ 16 50
Ohio Strong Softeners, No. 1	17 30@ 17 80
Southern Silvery	15 35@ 16 35
Southern Coke No. 1	14 10@ 14 35
Southern Coke No. 2	13 60@ 13 85
Southern Coke No. 3	13 10@ 13 35
Southern Coke No. 4	12 60@ 12 85
Southern No. 1 Soft	14 85@ 15 35
Southern No. 2 Soft	14 35@ 15 10
Alabama Car Wheel	21 85@ 22 85
Malleable Bessemer	15 50@ 16 00
Jackson Co. Silvery	18 80@ 19 80

BLACK SHEET STEEL.

No. 16	per 100 lbs.	$2 50
No. 18-20	per 100 lbs.	2 60
No. 22-24	per 100 lbs.	2 70
No. 25-26	per 100 lbs.	2 80
No. 27	per 100 lbs.	2 90
No. 28	per 100 lbs.	3 00
No. 29	per 100 lbs.	3 15

SMOOTH STEEL.

Wood's Smooth	No. 15-17	3 85
" "	No. 18	2 95
" "	No. 20	2 85
" "	No. 22-24	2 85
" "	No. 25-26	3 05
" "	No. 27	3 15
" "	No. 28	3 25

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON

F.O.B. Chicago 75%

HOOP IRON.

¾x22	¾x20	⅞x20
$3 20 100lbs.	$3 10 100lbs.	$3 00 100lbs.
1x20	1¼x19	1½x19
$3 90 100lbs.	$3 85 100lbs.	$3 75 100lbs.

PAINTED CORRUGATED IRON.

8 x 2½ feet Sheets, 28 gage, per 100 lbs. $3 60

SOLDER.

XXX Guaranteed ½&½ per lb.	19¾c
Commercial ¼&¼	18¾c
No. 1 Plumbers	16 c

SHEET ZINC.

600 lb. Casks	base, per cwt. $6.90
300 lb. Casks	per cwt. 7.10
Sheets	per cwt. 7.15

COPPER.

Copper base, 22c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@4 62½c
Bar	6¼
National (White) brands (in less than 100 lb. lots) per lb	7¼

HARDWARE.

ADZES.

Carpenters'.
- Ajax 50%
- Blood's 40&5%
- Hunt's 25%
- White's 12½%

Coopers'.
- Barton's 20%
- White's 15%

Ship.
- Ajax 50%
- Blood's 40&5%
- Hunt's 25%
- White's 12½%

AMMUNITION.

Caps, Percussion—per 1,000.
- F L Waterproof, 1-10s 40c
- G D 35c
- Eley's 52c

Cartridges.
- Peters Rim Fire Ctgs 50&3%
- Peters Cent Fire, Pistol & Rifle 25&3%
- Peters Cent Fire, Military and Sporting Ctgs 15&8%
- Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.
- Peters Blank Ctgs. 22 cal. $1 18
- Peters Blank Ctgs. 32 cal., C. F. 4 40
- Peters B B Caps, Round ball $1 44
- Peters B B Caps, Conical ball $1 85
- U. M. C. Rim Fire Ctgs 50&3%
- U. M. C. Cent. Fire, Pistol & Rifle 25&3%
- Winchester Cent. Fire, Military and Sporting Ctgs 15&8%
- U. M. C. B B Caps, Round Ball $1 75..18%
- U. M. C. B B Caps, Con. Ball $1 85 net
- U. M. C. Rim Fire Shot Ctgs. 50&15&3%
- U. M. C. Cent. " " 25&15&3%

Primers.
- Berdan Primers $1 00
- Peters Primers 1 20
- U. M. C. Primers 1 20
- Winchester Primers 1 20

Shells.
- Peters Empty Paper Shells, 10 and 12 gauge. League 25&3%
- Peters Empty Paper Shells, 16 gauge. League 30&3%
- Peters New Victor Nitro Shls 20&3%
- Ideal 25&7%
- Peters Loaded Shells. League and Referee Semi-Smokeless 40&1%
- Peters New Victor Loaded Shells with King's Smokeless 40&6%
- Ideals Loaded with King's Smokeless 40&10&10&1%
- U. M. C. New Club, 16 gauge 20&2%
- U. M. C. New Club 25&2%
- U. M. C. Nitro 20&2%
- U. M. C. High Base 20&2%
- Winchester Blue Rivals } 40&1%
- Winchester Yellow Rivals } 40&1%
- Winchester Repeater 20&2%
- Winchester Leader 40&6%
- U. M. C. Loaded Shells, Black Powder } 40&1% full cases
- Winchester Loaded Shells, Black Powder } 40&1% full cases
- U. M. C. } Smokeless 40&10&10&1% full cases
- Winchester } Smokeless 40&10&10&1% full cases

Gun Wads—per 1,000.
- Peters Gun Wads 18%
- U. M. C. Gun Wads 18%

Powder.			Each
King's Smokeless,	kegs		$11 30
" "	½ kegs		5 80
" "	¼ kegs		2 97
" "	1-lb. cans		51
" "	1-lb. " rifle		70
Dupont's	"	50-lb. drum	22 45
"	"	25-lb. kegs	11 30
"	"	12½-lb. kegs	5 80
"	"	6¼-lb. kegs	2 97
"	"	1-lb. cans	51

Shot.
- Dropshot, sizes smaller than B, 25-lb. bags, per bag $1 60
- Drop shot, B and larger sizes, 25-lb. bags, per bag 1 85
- Buck Shot, 25-lb. bags, per bag 1 85
- Chilled Shot, 25-lb. bags, per bag 1 85

ANVILS.

Trenton, 70 to 80 lbs	9¾c per lb
Trenton, 81 to 150 lbs	9c per lb

AUGERS.

Boring Machine	60&10&5%
Carpenters' Nut	60&10&5%
Hollow: Ives' New Pattern	35%
Bonney's—list $30.00	65&10%
Stearn's, No. 1 dos.	$42 00
Stearn's, No. 3 "	33 50
Post Hole.	
Dalbey, 8-inch per doz.	$ 5 75
Digwell, 8-inch "	13 00
Howe's, 6 and 8-inch "	12 50
Iwan's Improved	40 & 5%
Vaughan's, 4 to 9-inch per doz.	6 50
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or without screw,	40-5%
Snell's, " " "	40-5%

AWLS.

Brad, handled per doz.		$0 28
shouldered, ass'd, 1 to 4 per gr.		95
patent, asst'd, 1 to 4	"	90
Harness, common	"	1 10
patent	"	90
Peg, shouldered	"	95
patent	"	40
Scratch, No. 2, handled	"	4 40
No. 1, socket handled per doz.		1 15
No. 20 Hurwood	"	2 00
Sewing, common per gr.		90
patent	"	90

AXES.

Boys', Handled:
- Camp Fire, 3-lb., per doz $5 75
- " " 4-lb., freighters', per doz 6 75
- Cast Steel, good grade, pr. dz. 5 50
- Pioneer, per doz 6 75

Broad:
- Peerless 50%
- Red Warrior, per doz $18 50

Firemen's, per doz 15 50

Single Bitted (without handles)

Gladstone,	per doz	$6 75
Hubbard's	" "	6 50
Hunt's	" "	6 25
Lippincott's	" "	6 25
Mann's	" "	6 50
Pioneer	" "	6 50
U. S. A.	" "	7 75
Valley Forge	" "	6 00
Second Quality	" "	5 75

Double Bitted (without handles):

Lippincott's	per doz	$8 50
Mann's	" "	8 50
Pioneer	" "	9 25
U. S. A.	" "	11 00
Valley Forge	" "	8 25
Ship, Blood's	" "	18 50

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BAGS, PAPER NAIL.

Pounds.. 3 5 10 16 20 25
Per 1,000. $1 60 1 85 2 60 3 40 3 90 4 75

BARS, CROW.

Pinch or Wedge Point cwt. $3 40

BEAMS—SCALE.

P. S. & W. Co 40%

BEATERS.

Carpet, Rattan	per doz	$2 40
Raymond's Steel Wire,	" "	80
Woven Wire, No. 4	" "	1 10
Egg.		
Dover Pattern	per doz.	$0 70
Genuine Dover	"	0 90
Mammoth Dover	"	1 75
Lightning	"	0 84
Lyon's (standard size)	"	1 75
Whip, French	"	1 35
Spiral	"	0 40
Spoon	"	0 40
Surprise	per gro.	1 45

BELLOWS.

Blacksmiths'		70&5%
Hand, 8 in.	per doz.	$ 6 85
10 in.	"	8 40
Molders', 12 in.	per doz.	13 00

BELLS.

Call.
- 2¾ in. nickeled bell per doz. $ 1 35
- 2¾ in. " brass bell " 3 60
- 3 in. " " " " 7 50
- 3 in. " silver alloy bell, per doz. 16 50
- 4½ in. " brass bell and base per doz. 14 50

Cow.
- Ordinary Goods 70&5%
- High Grade 60&10%
- Jersey 70&10%

Door.
- Bigelow Automatic per doz. $9 50
- Rotary.
- 3 in. bronzed iron bell " 5 25
- 3 in. nickeled " " " 7 50
- 3½ in. " " " " 9 00

Hand.
- Hand Bells, Polished 60@60&10%
- White Metal 50%
- Nickel Plated 40%
- Swiss 60&5%
- Silver Chime 33⅓%

Miscellaneous.
- Church and School, Steel Alloy 50, 10 & 5%
- Farm, lbs... 40 50 75 100 Each. $1 10 $1 30 $1 85 $2 65

Miscellaneous Cast.
- Strapped Sheep per doz. $1 90
- House Gong 40&5%
- Sleigh, Round, Loose 40&5%

BELTING

Leather—List dated Nov. 12, 1901.
- Standard 75%
- Eclipse 60-10&5%
- Extra Grade 50&10%

Rubber—
- Standard 75&5%
- Amherst 65&10%
- Extra 60&2½%

BEVELS—TEE.

- Stanley's, rosewood handle, new list 40&5%
- Stanley's Iron handle 40&5%

BINDING—OIL CLOTH.

Zinc		75, & 10%
Brass		75%
Brass Plated		75 & 10%

Auger. BITS.
- Extra Double Spur 70&5%
- Ford's Car and Machine 40&10%
- Ford Improved 40&10%
- Ford's Ship 40&10%
- Irwin 30&10%
- New Jenning's 50%
- Russell Jenning's 35&7½%
- Clark's Expansive 50, 10&5%
- Steer's " Small, new list $25.0
- Irwin Car 30&10%
- Snell's Car 60&5%
- " Ship 40&5%
- " " Auger Pattern Car 40&5%

Center 40&10%

Countersink—

Wheeler's	per doz.	$1 60
American Snail Head	"	0 70
" Rose "	"	0 80
" Flat	"	0 70
Buck Bros'. Flat	"	2 60
German	"	0 70

Dowel, New Jennings 40&10%

Gimlet—
- Standard Double Cut 50&5@50&10%
- German Pattern per doz. $0 48

Gouge	"	0 80
Spoon	"	0 80
Countersink	"	1 30

Reamer—

Buck Bros.' ½ Round.	"	3 75
" " Square	"	3 50
Standard ½ Round	"	0 75
" Square	"	0 75
German Octagon	"	0 75

Screw Driver—

Round Shank	"	0 48
" " extra quality	"	1 40
Square Shank	"	1 10

BLACKING—STOVE. (See Polish.)

BLADES—SAW.

Butchers'—
- Standard ¾ & 1¼ in 60&5%
- Clock Spring 60&5%
- Star 30%

Hack—
- Disston's 35&5%
- Griffin's 35&5%
- Star 30%

Wood—
- Jackson's per doz. $2 25
- Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.
- W. M. & Co.'s No. 20 per doz. $5 50

Snatch— BLOCKS.
- Wooden 50&10%
- Steel 40&10%

Tackle—
- Wooden 70&5%
- Steel 50, 10&5%

BOARDS.

Stove 40%

Wash—

Anchor	per doz.	$1 60
Globe	"	2 10
Banner	"	2 60
Crystal	"	3 15
Brass King	"	3 15
Nickel Plate	"	3 15
Enamel King	"	3 15

BOBS—PLUMB.

Carpenters', 8½ oz. iron	pr dz.	$0 65
1½ lb. " "	"	1 60
2¾ lb. " "	"	1 80
13 oz. lead	"	3 00
6½ oz. brass	"	3 30
Mason's, 3 lb. lead	"	4 00

BOILERS—FARM.

- Profit 30&5%
- Solon 25&5%

BOLTS.

Carriage, Machine, Etc.
- Carriage, ⅜x6¼ and sizes smaller and shorter 70&10&5%
- Carriage, ⅜x6¼ and sizes larger and longer 70&10%
- Machine 70&10%
- Elevator 50-10&5%
- Plow 45&5%
- Stove 80-5%
- Tire 73½&5%
- Wagon Box Strap 70&10%

Mortise Door—
- Gem 50-10&5%
- Ives' 50&10%

Barrel—
- Cast 50%
- Wrought 50&5%
- " Bronzed 75&5%

Flush, Wrought, B. K. 40&5%

Spring—
- Wrought 75&10%
- " Brass 75&30%

Square—
- Cast 40%
- Wrought 60-10&10%

BORERS.

Angular, Miller's Falls, per doz $12 75

Bung, Common Ring with Handle—

Inches	1½	1¾	2
Per doz	$6 00	6 90	8 10

BORERS—CONTINUED.

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each....25-10&5%

BOXES.

Mail, No..... 5 10 20
Per doz.....$3 65 10 50 13 00
Nitre—
New Langdon.....15&5%
Olmsted's 15%
Stanley's.....30%
Seavey's .....per doz 8 00
Twine, Nos... 20 30 25 121
Per doz $1 50

BRACES.

Common Ball.....$1 35@1 45
Barbers' Pattern .....60&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146.....50&10&7½%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.

Hay-Rack, Wenzelmann's No. 1, $12.60; No. 2, $13.20 per doz.
Shelf—
Cast Iron, Plain .....50&10%
Stanley's Wrought Steel.....
.....70-10&2½%
Wire.....75-10&5%

BROILERS.

Wire .....70&10%
Crown, Self-Basting, No.80..doz. $2 40

BUCKETS.

Pump Rubber—
Wychoff.....per gr. $4 75
Cooper..... " 5 50
Champion ..... " 7 50
Victor ..... " 9 50
Star..... " 5 00
IXL..... " 6 75
Well—
Galv'd Qts..... 8 10 12
Per doz $2 50 2 85 3 15
Wooden, top ear, plain, per doz 3 50
" " swivel " 4 60
" side-strap, plain " 3 60
" " swivel " 4 75

BUCKS, SAW.

Folding .....per doz $1 75

BURS, RIVETING.

Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.

Cast-Iron.....65&10%
Wrought Brass.....20%
Wrought Steel Bright—
Nos. 800, 804, 808, 810, 814 and 834
.....70-10-10&5%
Nos. 838, 840 and 842 ...70-10-10&5%
Nos. 822 and 828.....75-25-10-10&5%
Wrought Steel, Japanned—
Nos. 731 and 737.....70&10&10%

CALIPERS.

Double .....40&10%
Inside and Outside.....40&10%
Wing.....40&5%

CALKS.

Logger's Boot, (Lufkin R. Co's.)
.....per M $3 65
Toe.
Shoenberger.....per lb. 5c
Bessemer ..... " 5½c
American ..... " 7¼c
Swedes..... " 8¾c

CANS.

Cheese Factory Can Stock—
Gallons.... 15 20 30 40
Per set....$2 90 $3 15 $3 75 $4 75
Milk
Elgin Pattern,
Nos.....808, 810, 88.
Gal. 8 10 8
per doz....$22.50 $22.75 $23.15
New Elgin Pattern,
Nos. 105 108 110
Gal. each, 5 8 10
Per doz., $16.75 $18.50 $19.85
Iowa Pattern.
Nos. 508 610
Gal. 8 10
Per doz. $21.50 $22.75
New York Pattern,
Nos. 908, 910,
Gal. each, 8 10
Per doz. $25.15 $26.95
Oil—
1 Gal. glass, Daisy....per doz. $2 25
1 " cushioned " 3 90
Star, gals..... 1 2 3
Per doz..... $1 85 $3 00 $3 90
Per doz.
Champion Faucet, 5 gallon...$ 5 62
Sterling Tilting....5 " ... 8 25
"High C" Pump...5 " ... 9 25
Eureka Pump.....5 " ... 12 25
Wood Jacket .....50-10&5%

CAPS—GUN.

See Ammunition.

CARRIERS.

Hay—
Myers' Imperial.....each $3 40
" Clover Leaf..... " 3 40

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....35%
Bed.....60&10%
Common Plate—
Brass wheel.....60&10%
Iron and porcelain wheel...50&10%
Philadelphia Plate.....65&10%
Martin's.....40-10&5%
Payson's.....70%
Tucker's—Wood and Iron wheel..70%
" Rubber wheel.....65&10%

CATCHERS—GRASS

Lieder's No. 1.....per doz. $6 25
Eureka..... " 4 25
deal No. 4..... 50

CHAIN AND CHAINS.

Breast Chains—
Doubleslack.....doz. pairs $5 00
With Covert snaps " 4 75
" " slide..... " 2 90
Without slide..... " 2 60
Bright Ox Chains—
5-16in. $6 75; ⅜in. $5 75 per 100 lbs.
Bright Coil Chain—
American, new list.....33⅓%
German.....60-10&5
Triumph, new list.....30%
Cable Coil Chain—
Inch..... 3-16 ¼ 5-16 ⅜
Per 100 lbs....$9 75 $7 25 $5 90 $4 75
Inch ..... 7-16 ½ ⅝ ¾
Per 100 lbs....$4 60 $4 50 $4 35 $4 25
Cable Log Chain—Advance 25c per 100 lbs. on Cable Coil.
Cow Tie Chains—
American 2 toggle.....40-10 & 5%
" toggle and snap, 40-10&5%
" open and closed ring.....40&5%
Halter Chains—
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph " 30%
Jack Chain—
Brass.....60%
Iron.....60%
Picture Chains—
Light Brass, 3 ft.....per doz. 63c
Heavy " 3 " ..... " 75c
Pump Chain—Galvanized per 100 lbs.....$4 45
Safety Chain—Brass.....60&10%
Stretcher Chains—
5-16 in., $7.75—⅜in., $7.00 per 100 lbs.
Tie-Out Chains—Browns.....70&10%
Trace Chains—Western Standard—
6½— 6-2..... .....per pair 26c
6½— 8-2..... " 30c
6½— 8-3..... " 29c
6½—10-2..... " 35c
7 —10-2..... " 40c
Add 2c per pair for Hooks.
" 2c " for Twist Link.
Wagon Stay Chains—
Inch ¼ 5-16 ⅜
Per 100 lbs. $6.50 $6.00 $5.25
Well Chains—
With Swivel.....per doz. 95c
Without " ..... " 80c

CHALK-CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l
Crayon..... " 5½c

CHARCOAL.

In barrels ..... per bu. 21c

CHECKS-DOOR.

Blount 30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box— Inches..... 10 12 14
Round....per doz. $2.10 $2.25 $2.75
Flat.....per doz. 2.85 3.60 4.20
Cold—
Good quality.....per lb. 12@ 20c
U.S.A., extra quality..per lb. 22c
Socket, Framing and Firmer—
Barton's..... 20%
P. S. & W. Co's..... 70%
For beveled back, add..per doz..... 60c
Tanged, Firmer—
P. S. & W. Co's.....35&5%
With Handles add... per doz. 60c
Chopper's, Enterprise Meat—
No. 12.....$2 75
No. 22..... 4 50

CHUCKS-DRILL.

Standard Tool Co.'s 40%
Goodell's, for Goodell's Screw Drivers.....per doz. $6.25
Yankee, for Yankee Screw Drivers..... 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each $3.85 4.10 4.30
Belle, Barrel..... 70&5%
Common Dash, Gal.... 4 5 7
Per doz..... $6.75 7.50 8.00
Hero.....70%
Union, Gal..... 5 7 10
Each $3.65 3.90 5.00

CLAMPS

Adjustable—Martin's..... 40%
Carpenters'—Steel Bar..... 30%
Carriage Makers'—P. S. & W. Co.'s.....40, 10&5%
Hose—
Sherman's, brass, ¾ in., ...per doz. 33c
Double, brass, ¾ in...per doz. 65c
Saw Filers—
Disston's list, $30.00 ..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's..... 40%

CLAWS-TACK.

Cast, wood hdle...per doz., 45@ 60c
Forged steel, wood handle .....per doz. 80c
Solid Steel.....per doz. $1.60
Giant..... .....per doz. .60

CLEANERS.

Drain— Iwan's Adjustable.....50%
Iwan's Stationary.....40%
Pot—Wire.....per doz. $0.45
Side-Walk—Steel..... per doz. $.15
Window—
Peerless.....50, 10&5%
XLCR.....55&10%

CLEAVERS.

Family—Ajax, In..... 6 7 8
Per doz $5.50 5.75 6.25

CLEVISES.

Malleable.....per lb. 3¾c

CLIPS.

Axle.....65&5%
Damper—
Standard .....per doz. $0.70
Troy ..... " .38
Hame..... " .20

CLOTH.

Emery—
Ajax.....50&10%
B. & A.....50%
Hardware Wire—Full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.
Screen Wire—
12 mesh, painted, per 100 sq. ft. $1.20
14 " " " " 1.85

COCKS—BRASS.

Compression Bibb.....60&10&5%
" Lock.....60&10%
Lever Bibb.....70%
Liquor .....per doz..$8 75
Racking.....60&10%

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

COLLARS—STOVE PIPE.

Inches 5 6 7
Plain Tin....per gr. $2.50 $2.80 $3.75
Japanned Tin, " 3.90 4.20 5.40
Lacquered Brass" 3.30 3.60 4.80

COMBS—CURRY.

Nos. 000 20 321 330 417 416
Per doz. $0.32 .80 1.00 .95 .80 1.00
Nos. 531 533 530 535 545 390
Per doz. $0.96 1.20 1.10 1.65 1.40 1.30

COMPASSES.

Carpenter's..... 70%
Pencil—Faber's.....per doz. $1.00

COOLERS—WATER.

Galvanized Lined—Lever Faucet.
Gal. 2 3 4 6 8
Each $1.35 1.65 2.00 2.35 2.95
Galvanized Lined—Telegraph Faucet
Gal. 2 3 4 6 8 10 15
Ea. $1.65 2.00 2.35 2.65 3.30 3.65 4.90
Porcelain Lined—
Gal. 3 4 5 6 7 8 10
Ea. $4.50 5.75 7.00 7.75 8.60 10.40 12.25

COPPER—SEE METALS.

COPPERS.

Soldering—1 to 2 lb.....per lb. 25@29c
3 lb. and larger..... " 23c

CORD.

Picture—White Wire—List October 1900.....80&10%
Sash—
Baltic Braided Flax...per lb. 21½c
India Hemp, cable laid " 13 c
" " hawser " " 12 c
" " plain " " 13½c
Italian " cable " " 21½c
Russian " " " " 17 c
Samson, white " 31½c
" spot " 30½c
Silver Lake, white " 26½c
" " drab " 31½c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS—SPRING.

5-16 in. and smaller..... .....80&5%
⅜-in. and larger 75%

COUPLINGS—HOSE.

Brass .....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON—SEE TENTS.

CRADLES—GRAIN.

Morgan's Grapevine ..per doz. $21 00

CRAYONS—SEE CHALK.

CROOKS—SHEPHERDS'.

American Pattern .....per doz. $6 75
Montana " ..... " 8 00
Scotland " ..... " 8 00

CROW BARS.

Pinch or Wedge Point, per 100 lbs $3 40

CUTTERS.

Meat—
Enterprise Nos. 5, 10, 12, 22, 32, and 42.....25%
No. 100, list, $18.00.....40&10%
Nos. 2 and 4.....35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00
Pipe—Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00
Slaw and Crout—
3-knife Crout.....per doz. $9.25
1 " Slaw..... " 1.50
2 " " ..... " 2.10
Washer..... " 7.75

DAMPERS—STOVE PIPE.

Standard.....50&10%
American..... 40&10%

DIES—STOCKS AND

Discount..... 40%

DIGGERS.

Post Hole—
Iwan's Split Handle..per doz. $8.00
Iwan's Perfection....per doz. 8.00

DIVIDERS.

Wing 70%
Extension Wing.....35&5%

DIGGERS—POST HOLE.

Atlas.....per doz. $8.50
Eagle..... " 6.25
Eureka..... " 6.50
Hercules ..... " 10.25
Ryan's..... " 17.00
See also Augers—Post Hole.

DOORS—SCREEN.

⅜ in. 4 panel painted per doz. $ 6.75
½½ " " " 7.25
In. 4 panel natural pine, fancy.....per doz.. 11.25

DOOR HANGERS—BARN.

Single Flange, D. B. Rail, ...per 100 ft. 1 60
Novelty Check Back,
..... 3 in 4 in 5 in 6 in
Per doz. pairs, $2.60 $3.90 $4.95 $6.25

DRILLS.

Bit Stock.....60%&65&5%
Blacksmith's Twist.....60%
Breast—
Common.....each, $2.25
Millers' Falls..... " 2.10
Hand—
Goodell's Automatic—per doz.
No. 01 No. 03 No. 3 No 20
$7.75 $12.50 $14.25 $11.00
Goodell's Single Gear per doz. $16.00
Millers' Falls " " 12.50
" " Double " " 15.00
Reciprocating—
Goodells'.....per doz. $17 00
Bit Stock.
Standard List....60&5%@50%@10%

DRIVERS—SCREW.

Hurwood .....40&10%
Standard.....65&10%
Ajax.....70&5%
Champion.....50%
" Pattern.....75&5%
Clark's Interchangeable.. .... $3¼%
Edison.....60%
Reed's Lightning.....50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet.....50%
" " Spiral.....50&10&5%

ELBOWS.

Conductor.....60%
Adjustable Stove—In. 5 6 7
Smooth....per doz. $0.95 0.95 1.40
Plan'd..... " 2.10 2.35 3.00
Corrugated Stove—In. 5 6 7
Smooth.....per doz. $0.95 .95 1.40
Pol'd..... " 1.70 1.75 2.60
Plan'd..... " 2.60 2.85 3.50
Four-Piece Stove—In. 5 6 7
Smooth....per doz. $0.57 .60 .98
Pol'd..... " 1.00 1.05 1.50
Plan'd..... " 1.50 1.70 2.60

EMERY—TURKISH.

Size .....5 lb. pkgs. ½ kegs, kegs.
No. 60 to 150, ⅌ lb. 6¼c 4¾c 4½c
Flour.... . " 5¼c 3¾c 3½c

ENAMEL—IRON.

English, ½-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. R., " " ... " 1.25
Peerless 1 50

EXTRACTORS—PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B.W.
Drifting Pick.....60&10%
Hooks and—
Brass.....60&5%
Iron .....65&10%

FASTENERS, STORM SASH.

Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... " 1 10

FASTENERS, BLIND.

Zimmerman's.....Net

FAUCETS.

Angle Plug.....per doz. $0 84
Brass—Andrew's .....60&10%
Petroleum.....60-10&5%
Wood—Cedar .....40&50%
Cork Lined.....60%
Metal Key.....65&5%
Measuring—Enterprise.....35&5%
See also Cocks.

FILES AND RASPS

Arcade .....75&5%
Black Diamond.....70&10%
Disston's.....75&10%
Great Western.....75&5%
Keystone Mill.....80&20%
Kearney & Foote .....75&5%
Mill, 2d quality.....80&10&5%
New American .....75&10&5%
Nicholson's.....70&10%
Royal Mill .....80@20%
N. S. A.....70&10&5%

FILTERS.

Improved Natural Stone. $2 50@13 50
Subject to large discounts.

FORCEPS—PIG

Barber's.....per dox , $7 25
Superior..... " 4 75
Whisson's Imp..... 6 00

FORKS

Barley—
Steel.....60&20%
Wood, 4 tines. $5.50; 6 tines. $6.50 doz
Coal 40%
Coke 40%
Cottonseed 40%
Hay—
Diamond, 2 tine.....50, 10&5%
" 3 " .....60&5%
" 4 " 65%
Golden Eagle 3 tine .....60&10%
" " 4 " .....60& 0%
Digging..... .....60&10%
Scoop 35%

FORKS—CONTINUED.

Header—
Diamond, 2 tine.....67½&10&5¢
" 3 " .....65¢
" 4 " .....65¢
Golden Eagle, 4 tine.....10&10&5¢
Manure—
Diamond.....60, 15&2½¢
Golden Eagle.....66⅔&10¢
Ore.....40¢
Spading—
Diamond.....70&2½¢
Golden Eagle.....70&2½¢
Hack Saw— FRAMES
Crown.....per doz., $ 6 25
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM

Arctic—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 75 2 30
Qts..... 8 10 12 15
Each.....$2 85 3 75 4 50 5 20
White Mountain, with Crank—
Qts..... 1 2 3 4 6
Each.....$1 20 1 65 1 90 2 10 2 70
Qts..... 8 10 12 15
Each.....$3 60 4 60 5 90 7 00

GATES.

Molasses and Oil.
Perfection.....50&5¢
Stebbin's.....75&10&5¢

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s..20&10&2½¢
Cream Pail, Fairmont, per doz..$3 75
Marking, Mortise, etc.
.....50&10¢@50&10&5¢
Saw—Atkin's agle. 55c, dbl. 80c pr doz.
Wire.
Disston's.....25¢
P. S. & W. Co.'s.....20¢

GIMLETS.

Discount.....40@40&10¢

GLASS—WINDOW.

Single and double strength, 6x8 to 16 x24.....90&5¢
Larger sizes.....90&5¢

GLASSES—LEVEL.

Stanley R. & L. Co.....50&5¢

GLUE.

Bulk.
B Amber.....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per lb 17 c
Liquid.
Eagle.....40 ¢
LePage's—
List "A".....37½¢
List "B".....33⅓¢
List "C".....25 ¢

GOODS.

Bright Wire..... 80&15¢

GREASE, AXLE.

Wood Boxes.
Diamond.....per gr. $5.00
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
Wood Pails.
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 68c each.
Tin Cans.
1 lb. Frazer's carriage, pr. doz. $1.30
1½ lb. " wagon . " 1.30
3 lb. " " " 2.40
5 lb. " " " 3.50

GRIDDLES

Soapstone.....40&5¢

GRINDSTONES

Family—In..... 7 8 9
Per doz.....$8 25 9 50 11 00
Loose.
Per ton.....$20 00@$21 00
Mounted—
Ball Bearing..... 1 2 3
Each.....$3 40 3 25 3 15
Common Bearing.. 1 2 3
Each.....$2 90 2 70 2 55

HAFTS—AWL

Brad—Common.....per doz., $0.18
Peg—
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
Sewing—
Common..... " 21
Patent..... " 52

HALTERS

Jute Rope.....per do 80 80
Sisal Rope..... " 1 95
Web..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

Blacksmiths' Hand
Maydole's.....40&10¢
Engineers'—
Maydole's.....40&10¢
Farriers'.
Maydole's.....35&5¢
Machinists'.
Maydole's.....40&10¢
Nail.
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast.....per doz $1 10@$1 50
Maydole's.....30&7½¢
Vulcan.....35&5¢
Riveting.
Maydole's.....35&5¢
Shoe.
Cast.....per doz 75c

Tack.
All Iron.....per doz $0 35
Pol'd Iron, Hickory hd " 0 52
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....70&10¢
5 lbs. and over.....75¢
Masons'—Single & Double Face..75¢
Auger. HANDLES.
Common Ass'd.....per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
Axe.....40¢
Chisel.
Hickory, Tanged Firmer, Assorted, 24c; Large, 36c per doz.
Hickory, Socket Firmer, Assorted, 18c: Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted.....per doz 24c
Coal Pick.....40¢
Drifting Pick.....40¢
File, assorted 13c. large 16c per doz.
Hammer.
Adze Eye.....per doz 42c
Blacksm'ths'.....per doz 45c@65c
Machinists'..... " 39c@58c
Hatchet.....per doz 42c
Hay and Manure Fork.....40&10¢
Hoe and Rake.....40&5¢
Saw, Plain 72c, Varnished 68c per dz.
Screw Driver, Assorted 42c, Large 48c per doz.
Shovel and Spade.....40¢

Barn Door—HANGERS
King.....per doz. prs., 5 00
Monarch.....60&10¢
"Never Jump" Hinge.....50&10¢
Peerless, Loose Axle.....60&10¢
Perfection, Roller Bearing..70&5¢
Phœnix, Roller Bearing... 70&5¢
Prouty.....per doz. prs., $5 50
Rival..... " " 3 90
Superb..... " " 6 25
Safety Flexible " " 6 65
Wagner's Adjustable.....70@10¢
Warehouse.....60¢
Conductor Pipe—
Iwan's Perfection.....50¢
Parlor Door—
Acme.....per set $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
" New Model..... " 2 80
Prouty..... " 3 00
Lundy.....50&10¢
Eave Trough—
Baker's.....per gr., $2 60
Imperial.....10¢
Wire.....25¢

HASPS.

Hinge, Wrought.....70&5¢
With Staples—See Staples.

HATCHETS.

Ajax.....40&10&5¢
Blood's.....40&10¢
Cast Claw.....per doz $1 50@$1 75
Cast Shingling..... " 1 20
Duffy's Barrel.....per doz 17 50
Germantown.....35&5¢
Hammond's.....30&10&5¢
Roger's Ideal.....per doz $5 25
Underhill's Star Lath.....40¢
S. A.....30&10¢

HAY RACK BRACKETS.

Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

HINGES.

Blind.
Clark's Gravity, per doz sets....80c
Parker's.....65¢
Shepherd's Noiseless, for Wood casing.....doz. $1 05
Gate.
Clark's, 1 2 3
Hgs & Lthe. dz.. $2 35 $2 60 $3 60
Hinges Only, " .. 1 70 1 90
Latches Only, " .. 0 70 0 75
Knuckle.....per doz prs $6 00
Leed's..... " sets 6 75
Superior..... " prs 9 25
Spring.
American.....25¢
Bommer Bros. Ball B'g Floor 40-10¢
Bommer Bros. Spring Hinges .40¢
Chicago.....25&5¢
Clover Leaf.....per gro $9
Columbia Dbl. Acting....40&10&5¢
Gem.....25¢
Ideal Detachable,....per gro $12 00
New Idea..... " 9 60
Oxford.....20¢
Wrought Iron.
Light Strap Hinges.....80&10¢
Heavy Strap Hinges.....
.....80-10-10&5¢
Light T Hinges.....75-10&10¢
Heavy T Hinges.....75&10¢
Extra Heavy T Hinges.....
.....80-10&5¢
Cor. Heavy Strap.....80-10-10&5¢
Cor. Ex. Heavy T.....80-10&5¢
Screw Hook and Strap.
6 to 12in.....per 100 lbs. $4.00
14 to 20in..... " " 3.75
22 to 36in..... " 3.50
Screw Hook and Eye.
¾ to 1in.....per 100 lbs. $6.50
⅝in..... " " 8.00
½in..... " 10.00

HOES.

Garden.....70&10¢
Grub:
Ajax.....50&10&5¢
Extra.....60&5¢
Hazel.....per doz $6 50
Ladies' and Boys'.....70&12½¢
Mortar.....70, 10&10¢
Planter's Eye.....62½¢
Weed.....66⅔, 10&10¢

HOOKS.

And Eyes.
Brass.....50&10&5¢
Iron.....65&10¢
Awning.....per gro $1 80
Belt.....75&5¢
Bench—See Stops, Bench.
Box, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
Bush.
Common Axe Handle
.....per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
Chain—In. ¼&5-16 ⅜ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
Clothes Line.
Japanned.....per doz 21c@22c
Galvanized..... " 35c
Coat and Hat.
Cast Iron.....per gro 72c@$1 00
Gem Wire.....65&10¢
Conductor.
Malleable.....50&10¢@50&10&5¢
Wrought.....40&10¢@50¢
Corn.
Common, unpolished, per doz. $1 30
" polished... " 1 70
"Cut Easy," .....per doz. 2 65
Clyde's, ... " 2 40
Brooke's..... " 2 65
Gate.—See Goods, Bright Wire.
Grass.
Common, Nos. 2 3 4
Per doz..... $1 70 $1 75 —
German.....per doz $1 90
Little Giant..... " 3 10
Wood's..... " 1 30
Hammock.
Common..... " 21c
With Plate..... " 36c
With Screw..... " 36c
Piggot's..... " $1 05
Lambrequin or Drapery...per gro 21c
Picture.....50¢@50&10¢
Potato and Manure.....60&15¢
Screw, Brass.....80&20¢
(See Goods, Bright Wire.)
Seat Spring.....per lb 5½c

HOOPS—TUB.

Ever Ready.....per case $1 65

HOSE—GARDEN.

Ply 3 4 5 6 8
Black, pr ft. 7½c 8½c 9¾c 10¾c 12½c
Cotton, 3 ply.....per ft 6¾c
Red, 3 ply..... " 7¾c

HUSKERS.

Boss.
Nos. E A B P PX
Dz. $1 85 $2 00 $1 95 Gr. $5 90 $5 20
Nos. 2000 3000 4000 O OX
Gr. $3 10 $6 75 Dz. $1 15 $2 20 $1 65
Brinkerhoff's.....per gro 14 50
Harrington.....per gro 4 20
Ideal—Nos. 102 101 100
Per doz..... $1 35 $2 50 $2 75
Johnson's.....per gro 7 75

IRON.

See Metals—First column.

IRONS.

Curling.
Common.....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby..... " 1 50
Tourist, Folding..... " 0 90
Pinking..... " 0 60
Plane.
Wood Bench.....20&5¢
Stanley R. & L. Co. (new list)35&5¢
Sad.
Charcoal.....per doz $11 25
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 81c
No. 55 J, " ... " 78c
No. 50 T, " ... " 81c
No. 55 T, " ... " 81c
No. 50, Howells..... " 77c
No. 55, " ..... " 74c
Tailors' Sad.....per lb 4¼c
" Geese..... " 4¼c
Tuyere.
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 2 60

JACKS.

Locomotive.....75&5¢
Wagon.
Meeker's.....per doz $1 25
Miller's No. 2..... " 7
Winner..... " 7

KETTLES.

Brass.....20¢
Caldron.....50¢
Copper.....per lb 27½c
Maslin.....65&10¢
Sugar.....50&10&5¢

KNIVES.

Best Topping.
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 3 50
Cooper's Hoop.....15¢
Corn.
Acorn.....per doz $3 65
Ajax..... " 3 25
Clipper, Light, $1 75; Heavy, $1 90 per doz.
Disston's.....per doz $3 15
Easy..... " 7 75
Rugged Razor..... " 3 40
H. S. Earle's..... " 3 15
Drawing.
Standard.....70¢
Adjustable.....30¢
Barton's Carpenters'.....10&5¢
" Folding Handle....35&5¢
Hay.
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Iwan's Sickle Edge..... 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point. " 8 75
Hedge.
Ajax, Heavy, $5 75; Ex. Heavy, $7 75 per doz.
Mincing.
Common, Single.....per doz 45c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade. $1 90 per doz.
Putty.
Common.....per doz $4c
Goodell's.....per doz $1 30@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.

Base, 2¼-in. Maple, Rubber Tip,
.....per gro $1 60
Door, Mineral.....per doz 0 80
Porcelain..... " 0 90
Jet..... " 0 85
Picture.....60&10&5¢

LADDERS.

Common Long.....per ft 8½c@13c
Extension.....per ft 10½c
Step.
Common..... " 6½c
" With Shelf, add 10c.
I X L.....per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.

Bull's Eye Police.
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
Tubular, Beeser.....40&10&5¢

LEADERS—CATTLE.

Nos. 1 2 3
Per doz... $0 70 $0 85 $3 75

LEATHER—LACE.

Cut.....50&10¢
Sides, Ex. Quality.....per sq ft 20c

LEATHERS—PUMP.

Valve and Plunger.....50¢

LIFTERS.

Stove Cover.
Japanned.....per gro $2 75
Coppered..... " 3 60
Chilkoot..... " 4 [illegible]
Devore's..... " 5 50
Zero..... " 3 90
Transom, Payson's.....70&10¢

LINES.

Chalk, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 23c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz..... 24c 30c 35c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... 23c 26c 32c
Masons', in 100-ft hanks...doz $1 00
Clothes.
60-ft Jute.....per doz $0 95
72-ft " ..... " 1 10
60-ft Sisal..... " 1 60
72-ft " ..... " 2 10
60-ft Cotton..... " 1 35
50-ft Braided Cotton.....95¢

LINING—STOVE.

In Bricks.....per crate 42c

MACHINES.

Boring	Without Augers.	With Augers.
Ajax.....per doz	$5 25	$6 75
Angular..... "	3 25	5 00
Boss..... "	4 50	5 00
Upright..... "	2 90	4 00

Leather Riveting.
Chicago, Pomeroy....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
Washing.
Boss. 1 2 5 3
Per doz.. $57 00 $63 00 $69 00 $80 00
Globe, No. 1.....per doz $51 00
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00

MALLETS.

Carpenters'.
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory.....per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ.. " 2 25
Tinners'.
Applewood..... " 1 65
Hickory..... " 60
Hickory Sheet Iron... " 25

Door. MATS.
National Rigid.....60&5%
Queen Flexible.....50%
Hose.
Standrd Quality.....per gross $2 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex. Heavy.....per doz 1 00

MATTOCKS.
Ajax.....50&10%
Extra.....60&5%

MAULS.
Iron, lbs. 10 13 16 18 21
Per doz. $3 40 $4 20 $5 00 5 50 $6 00
Wood face, lbs. 10 11 12
Per doz..... $4 75 $5 00 $5 25
Wood Choppers'.
Lake Super'r & Oregon Pat.70&10%

MEASURES.
		½ pk	1 pk	½ bu
Galvanized..per dz		$3 75		
Japanned....	"	$1 50	2 25	$2 90
Iron Bound.	"	1 40	1 80	2 10

Babbitt. METAL.
Alm.....per lb 8¾c
Best..... " 23c
Common, No. 4..... " 6½c
Copper Mixed..... " 18½c
Magnolia Metal..... " 19c
Tony..... " 10¼c
See Metals—In first column.

MICA.
First Quality.....40, 10&5%
Second Quality..... .....60%

MILLS—COFFEE.
Enterprise.....25&5%
National.....30%
Parker.....50&10%@60%

MOPS.
Bris.....per doz $3 15
Handled Cotton.
Lbs. ¾ 1 1¼ 2
Per doz.. $1 85 $2 20 $2 50 $3 15

MOWERS—LAWN.
Ball-Bearing.
In. 15 17 19 21
Each..... $7 50 $8 50 $9 50 $10 50
Champion.
In. 12 14 16 18 20
Ea.. $2 30 $2 35 $2 35 $2 65 $2 75
Champion, High Chief.
In. 16 18 20
Each..... $4 00 $4 50 $5 00
Cheap Grades.
In. 12 14 16 18
Each..... $2 10 $2 10 $2 10 $2 20
Clipper.....50&10&10%
Girard, in. 14 16
Each..... $3 75 $4 00
Philadelphia.
All Styles Except A & E 60&10&10%
Style A.....50&10%
Style E, High Wheel..60,10,10&10%
Drevels.....50%
All Day.....Net Price

Horse. MUZZLES.
Nos. 1 2 3 4 5
Doz.$0 30 $0 50 $0 55 $0 70 $1 00

Horse Shoe. NAILS.
Ausable.....50%
Capewell.....10%
Perfect.....40&5&
Putnam.....33⅓%
Star.....35%
Picture.
Brass Head.....40&10%
Judd's.....40&10%
Brads.....80&10&10%
Wire Nails—Small lots.....$2.30
Car load lots..... 2.20

NETTING—POULTRY.
Galvanized Before Weaving.80&20
" After Weaving...80&15
Cut Pieces.....65&5%

NIPPERS.
End Cutting.
P. S. & W. Co.....40&5%
Stubb's Pattern.....40&10&5%
Hoof.
Heller's.....40&5%
P. S. & W. Co.....40&10%
V. & B.....40-5%
Nose. NOZZLES.
Genuine Boston.....per doz $3 40
Genuine Gem..... " 3 60
Magic..... " 3 60

NUTS—HOT PRESSED.
Square Blank.
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
Lb. 7½c 5¼c 4¾c 4⅝c 4⅝c 4½c 4½c
Square Tapped.
In. ¼ ⅜ ½ ⅝ ¾
Lb. 14c 9½c 7¼c 6½c 6¼c

OILS.
Linseed, Pure boiled.....per gal 37c
" " raw..... " 36c

OILERS.
Chase Pattern.
Brass and Copper.....35%
Zinc.....60%
Engineers'.
Cannon.....50%
Tin.....per doz $2 75@$3 25
Machine.
Ajax.....per doz $0 90
Copper Plated Steel... " 1 50
Malleable Iron.....40&10&5%
Tin.....per doz 55c@65c

OPENERS.
Box, in. 10 12 14
Flat....per doz $2 85 $3 60 $4 15
Round.. " 2 10 2 25 2 "
Can.
American.....per doz $0 26
Delmonico..... " 1 35
Never Slip..... " 0 45
Perfect..... " 58

Tip Top..... " 0 84
Crate, V. & B..... " 5 75

OUTFITS—COBBLING.
Combination..... .....per doz $11 50
Economical.... ..... " 4 90
Family..... " 10 00

PADLOCKS.
Standard Wrought.....70&10&5%
Champion.....50%
Eureka.....40&10&5%
Yale.....60&5%
Cream. PAILS.
14-qt., Without Ga....per doz $2 75
20-qt., " " .... " 3 25
20-qt., With Gauge.... " 4 20
Sap, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
Stock, Galvanized.
Quarts. 14 16 18 20
Per doz... $3 75 $4 00 $4 65 $5 25
Water, Galvd, qts. 10 12 14
Per doz..... $1 75 $2 00 $2 35
Wood.
Cable, 2-Hoop, $1 70; 3-Hoop, $1 90 per doz.
Cedar, 2-Hoop, $2 50 per doz.
Standard, 2-Hoop, $1 55; 3-Hoop, $1 75 per doz.

PANS.
Dripping.....50&10&5%
Fry, Common.....60&10&5%
Acme.....66⅔&5%
Roasting.
Brownie.....Each 30c@37c
L. & H..... " 58c@80c
Building. PAPER.
Plain.....per 100 lbs $1 15
Tarred..... " 1 25
Tarred Felt..... " 1 80
Diamond A, Red Rosin.pr roll 0 60
Leader, Red Rosin..... " 0 50
Sand and Emery.
Ajax.....50&10%
B. & A.....50 & 5%
Wrapping.
Grecian Express.....per lb 3⅝c
Rag..... " 2⅝c
Apple. PARERS.
Bay State.....per doz $13 00
Reading..... " 6 75
Turntable..... " 6 00
White Mountain..... " 5 25
Potato.
Goodsell's Saratoga..per doz. $6 50
White Mountain..... " 6 00

PICKS
Adze Eye Ore.....60&5%
Drifting and Poll Picks.....60&10%
Ajax Railroad.....50&5%
Extra Railroad.....60&10%
Surface.....60&10%

PINCHERS.
Carpenters', wrt. iron, pol. steel jaws.....30%
Blacksmiths'.....50%
P. S. & W.....40&10&5%
Clothes. PINS.
Common.....per gr..$0 12
Hoyt's..... " .. 30
U. S..... " .. 70
Picket.
Fluted.....per doz..$0 80
Round..... " .. 1 75
Spiral..... " .. 1 90

PIPE.
Conductor.	Nested	Not nested
Eastern	70&12½%	70&7½%
Central	70&7½%	70%
Southwst'n..	65-&7½%	65&2½%
Mo. River...	70&7½%	70%
Southern	65&10%	65&5%

Lead.
Full coils.....per lb..$0 6¼
Cut " ..... " .. 6½
Stove.
Acme—In. 5 6 7
Smooth, per jt. 10½c 10½c 12½c
Planished, " ..22c 33c 43 c
Peerless--Smooth..8½c 9c 11½c
Polished. 16c 18c 22 c
Planished 28c 31c 40 c
Made-up—In. 5 6 7
Smooth..... 8½c 9c 12 c
7 to 6 in. Smooth Tapers, pr jt..14c
6 in, Smooth T's..... " ..30c
7 to 6 in. Planished Tapers.....45c
Wrought Iron Gas Pipe.
⅜-in., black.....discount, 60%
½ " ..... " 63%
¾-in. to 4-in , black.... " 69%
4½ " 6 " .... " 66%
7 " 12 " .... " 64%
¾ " galvanized " 48%
½ " " " 50%
¾ " to 4 " " 56%
4½ " " 6 " " 52½%
7 " " 12 " " 50%

PLANES.
Ohio.....60&5%
Stanley Planes, new list..30%@30&5%
Bailey Planes.....35%
Sandusky.....30%
Corn, PLANTERS.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Potato
Acme.....per doz.. $6 25
Challenge..... " .. 10 75
Fencing.
Cronk's.....per doz..$9 25
Farmers' Choice..... " .. 8 75
Russell's..... " .. 8 65
Flat and Round Nose.
Bernard's.....30%
German.....50%
Lodi.....40%
Paragon.....40&10%
P. S. & W. Co.....60%
Gas—In. 8 10 12
Per doz.....$3.10 $4.00 $4.90

PLUMBS AND LEVELS.
Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....30%
Davis' Inclinometer.....20%
Stanley's
Nos.	00S	0S	2S	3S
Per doz..	$4.50	$5.30	$7.60	$8.65
Nos.	30	25	50	35
Per doz.	$13,00	$17.50	$17.50	$12.35

POINTS. Discount
Drive Well Points.....80&10&5%

POKERS--STOVE.
Wr't Iron, str't or bent, per doz.$0 50
Wr't Iron, wood hand'l " 75
Nickel pl'td. coil hdl's.. " 70

POKES--ANIMAL.
American.....per doz.....$2 60
Brown's, wr't steel " ..$5 25@6 25
Eagle..... " $4 25
Success..... " 2 60

POLES--FISHING.
Bamboo
Ft. 12 14 16 18 20
Pr 100..$2.75 $3.40 $4.75 $6.00 $7.75

POLISH.
Metal.
Pride of the Bar..... " .. 1 60
Putz Cream.
Pts. 1-6 ¼ ½
Per doz.....$0.84 $1.25 $1.80
Pts. 1 2 4 8
Per doz.$3.60 $6.00 $9.00 $18.00
White Silk, half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine
Pts. 1-6 ½ 1 2
Per doz...$0.68 $1.30 $2.15 $3.00
Shoe.
M. D. C.....per doz..36c@50c
F. C. O..... " 40c
T. M..... " 50c@$1 25
Imperial.....per gr.....$5 00
Stove.
Black Eagle, 1 lb cans, pr gr..$15 00
Black Silk—
5 lb. pail..... 70c
Paste, 5 oz. cans per doz.....$1.00
Paste, ½ lb. cans, per doz... 1.00
Black and Japanned—
Liquid, ½ pint cans per doz. 1.00
Liquid, 6 oz. cans per doz.... 75c
Steel Range Gloss per doz... 1.75
Blackene, 1 lb cans....pr gr.. $3 00
Black Jack, ¾ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate..... " .. 4 50

POPPERS, CORN.
Round or Square, 1 qt. per doz., 85@95c
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 25
1 qt. reversible .....per doz., 1 50

POTS—FIRE.
Berns.....each..$3 85
Clayton & Lambert's,each,$4 75@6 25
Gate City.....each.. 6 25
Gem..... " .. 6 75

POWDER.
See Ammunition.

PRESSES—FRUIT AND JELLY.
Enterprise Manufacturing Co... 25%
Henis.....per doz. $2 10

PRUNERS.
Disston's Pole.....per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 70, 10&5%

PULLERS.
Cork.
Modern.....each..$3 60
Quick and Easy..... " .. 2 90
Nail.
Giant.....per doz..$9 00@10 50
Giant Pattern. " .. 6 00
Tack--Giant .... " .. 60

PULLEYS.
Awning--Jap'd.....40&5% to 35&5%
Clothes Line..... .....20&10%
Hay Fork.
Iron Wheel, 5 in .....per doz..$1 85
Wood Wheel, 6 in ... " .. 1 80
Wood Wheel, 6 in... pass knot..... " .. 2 25
Hot House--Jap'd .....30&5%
Screw..... " .....30&5%
Side..... " .....30&5%
Sash.
Chicago .....per doz..$0 29
Clark's..... " .. 43
Common Sense, 2 in.. " .. 27
" Pattern, 2 in.. " .. 22
Empire..... " .. 24
Ideal..... " .. 24
Grand Rapids, No. 17 " .. 24
" " No. 11 " .. 25

PUMPS
Pitcher Spout.
Nos. 1 2 3 4
Each.....$0.95 $1.05 $1.15 $1.40
Spray.
Blizzard.....per doz..$14 25
Cyclone, tin..... " .. 3 90
" copper..... " .. 6 75
Daisy..... " .. 8 75
Little Giant.....each.. 2 40

PUNCHES.
Conductors', No. 22....per doz..$3 50
Machine.....per lb . 19
Saddlers'.
Common.....per doz..60c@70c
Good..... " ..72c@84c
Spring.
1 Tube.....per doz. $3 25

PLATES--TIN.
See Metals in Column 1.

PLIERS.
Button's--In. 4½ 6 8 10
Per doz.....$2.60 $3.10 $3.90 $5.20
Button's Pattern.
In. 4½ 6 8 10
Per doz.....$2.35 $2.50 $3.45 $4.40
Cutting.
Cronk's Comb.....per doz..$6 25
Bernard's.....30%
Lodi.....40&10&5%
Stubb's.....50%
4 Tube, revolving.... " .. 5 25
Tinners'.
Hollow.....40%
Solid.....each..5½c

PUTTY.
In Bladders.
Strictly pure .....per 100 lbs. $3 25
Commercial ..... " " 2 10

RAIL.
Barn Door.
Light Wrought.. .....per ft. 3c
Safety..... " 4½c
Single Flange..... " 1⅜c
Smith's Wro't Bracket—plain 3½c
Smith's Special..... .....4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel.....30%
Smith's Milled Steel.....4½c
Sliding Door.
Painted iron .....per ft. 4½c
Bronzed wr't iron..... " 8½c

RAKES.
Coal or Road.....per doz. $6.50
Garden.
Steel, braced.....75&15%
Steel, bow.....70%
Malleable iron, heavy.....70%
Hay—Wood.....per doz. $1 40@2 00
Lawn—Wood.
Common .....per doz. $2 50
Automatic..... " 6 00
New Lawn Queen .... " 3 60
Jumbo, 26 teeth ..... " 6 50

RASPS—See Files.

REGISTERS.
List July 1, 1902
Black and White Japanned..75&10%
Nickel Plated.....75&10%
Electroplated, Brass, Bronze or Copper.....75&10%

RINGS
and Ringers—Hog.
Blair's Rings .....per doz. 60c
Blair's Ringers ..... " 84c
Brown's Rings..... " 65c
Brown's Ringers..... " 90c
Champion Rings..... " $3 25
Champion Ringers..... " 1 70
Hill's Rings..... " 48c
Hill's Ringers..... "70c@95c
Mazor Rings ..... " 80c
Mazor Ringers ..... " $1 15
Perfect Rings ..... " 84c
Perfect Ringers..... " $1 05
Wolverine Rings..... " 1 50
Wolverine Ringers.... " 70c
Bull.
Copper, 2½-in. 3-in.
per doz..... $1 35 $1 70
Steel.....per doz. 95 1 05
Steel, Nickel Pl'd, 2½-in., doz. 1 35
Rea's Self Piercing.. .....$1.95
Fruit Jar—White .....per lb. 30c
Key.
Split, round.....per doz. 1
Split, square ..... " 33c
Ball, round..... " 33c

RIVETS.
and Burrs.
Copper Belt .....50&10&5%
Coppered Iron 75%
Tinners'.....66⅔@60%
Hame.....per lb.
Slotted Clinch.....per doz. 70c@75c
Tubular—Nos. 1 and 2, assorted sizes.....per doz. 60c

ROPE.
Per lb.
Manila, 7-16 inch diameter and larger..... 11½c
Sisal, 7-16 in. and larger..... 9½c
Cotton.
¼ and 5-16-in. on reels...per lb. 12c
¼ and 5-16-in. in coils... " 12½

RULES.
Boxwood.....60%
Ivory.....35&5%

SASH WEIGHTS.
Per ton, f.o.b. Chicago.....$30.00

SAWS.
Back.
Disston's.....35&7½%
Jackson's .....35&7½%
Butchers'—Disston's .....35&7½%
Circular.
Disston's.....50%
Hiles' 50%
Compass.
Common .....per doz. $1 35@1 60
Disston's .....35&7½%
Cross-Cut.
Atkin's.....40%
Disston's.....40&10% &50%
Pocahontas Bit.....per ft. 30c
Pocahontas, Blued ..... " 41c
Dehorning.
Atkins' .....per doz. $5 40
Disston's..... " 5 75
Hack.
Disston's 35½%
Keystone 33⅓%
Sterling Hack Saw Blades.....35%
Sterling Hack Saw Frames.....35%

SAWS—CONTINUED.

Hand and Rip.
Brown's ....30&7½%
Disston's No. 7 ....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 ....25&7½%
Gorham's Comb ....30&7½%
Keystone ....30&7½%
Sam Sickles', hand...per doz. $4 25
"I Will," hand .... " 5 75
"I Will," rip .... " 6 75
"U. S. A." hand .... " 12 25
"U. S. A." rip .... " 14 25

Keyhole—Disston's ....25&7½%

Kitchen.
Sterling 25%

One Man 50%

Panel.
Brown's ....30&7½%
Disston's No. 7 ....30&7½%
Disston's Nos. D8 and 12, D100 and 112 ....25&7½%
"I Will" 40%
"U. S. A." ....40&10&5%

Pruning.
Avery's Duplex ....25&7½%
Brown's ....25&7½%
Disston's ....25&7½%

Wood.
Common ....per doz. $4 50
Handy .... " 7 50
Happy Medium .... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever ....per doz. $ 1.20
Stillman's Lever ....per doz. 1.30
Leach's ....per doz. 5.00
Nash's ....per doz. 4.20
Monarch ....per doz. 6.50
Atkin's Pattern ....per doz. 3.50

SAW FRAMES.

Common, plain ....per doz. $1 20
" painted .... " 1 60

Counter. SCALES.
Fairbank's Standard ....30, 10&5%
Hatch's ....per doz. $21 50
Little Detective, 1 2 3
Each $2 00 2 25 2 10
No. 1 Tea ....per doz. 7 75
Union Platform ....each 2 40
Pelouze 25%
Turnbull's Market 50%

Platform.
Common, 600 800 1000
Each $8 20 8 75 9 50
Chicago Standard ....30 to 33⅓%
Fairbank's Standard 40%
Osgood 50%

SCOOPS.

Ames ....10&10%

Eastern Pattern. Socket Strap.
Nos. 2 3 4 5 6
Per doz. $7.00 7.25 7.50 7.75 8.00
Nos. 7 8 9 10 12
Per doz. $8.25 8.50 8.75 9.00 9.50

Western Pattern. Socket Strap.
Nos. 1 2 3 4 5
Per doz. $7.00 7.25 7.50 7.75 8.00

Ajax. Eastern Pattern,
Nos 2 3 4 5
Per doz. $5.25 5.50 5.75 6.00
Nos. 6 7 8 9
Per doz. $6.25 6.50 6.75 7.00

Ajax. Eastern Pattern, extra heavy,
Nos. 3 5 6 7
Per doz. $7.25 7.75 8.00 8.25

Ajax. Western Pattern,
Nos. 4 5 6 7
Per doz. $5.75 6.00 6.25 6.50
Nos. 8 9 10 12
Per doz. $6.75 7.00 7.25 7.75

SCRAPERS.

Box.
Stanley's Adjustable, per doz. $3 60
Triangular .... " 2 50

Cabinet.
Ajax ....per doz. $2 25
Cast Steel .... " 65c@75c
Stanley's No. 80 .... " $8 40

Road.
Cubic ft. 7 5 3
Without runners, ea. $5.00 4.75 4.50
With runners .... " 5.25 5.00 4.75

SCREWS.

Bench.
Iron 30%
Wood, white maple..per doz..$3 60

Hand--Wood 30%

Hand Rail ....70&10%

Jack ....75&5%

Lag or Coach, Gimlet Point..75, 10&5

Saw—Centennial.
Nos. 1 2 3 4
Per doz. 22c 25c 32c 36c

Wood.
F. H. Bright Steel ....87½, 10&10%
R. H. Blued Steel ....85&5%
F. H Jap'd Steel ....82½&5%
F. H. Brass ....85&5%
R. H. Brass ....80&5%
R. H. Nickel Plated 75%

SCYTHES.

Clipper, grain ....per doz..$9 25
Dutchman, grass .... " 6 00
Golden Clipper, grass. " 5 50
U. S. A., grass .... " 7 00

SETS.

Nail.
Round, common ....per doz..$0 33
Square " .... " 42
Octagon " .... " 33
Square, Buck Bros.. " 1 25
Cup Point, knurled, pr doz. 70c@90c

Steel.
Farmers' ....per doz..$1 45
Tinners' ....50&10%

Saw.
Aiken's Pattern ....per doz..$3 50
Common Lever .... " 1 20
Disston's Monarch .... " 6 50
" X Cut .... " 11 75
German .... " 1 35
Morrill's Old Style .... " 5 00
" Pattern .... " 4 50
Leach's .... " 4 80
Nash's Hand .... " 4 00
" X Cut .... " 5 50
Stillman's Lever .... " 1 30
" X Cut .... " 2 50

SHARPENERS--SKATE.

Diamond ....per doz..$1 60

SHAVES--SPOKE.

Iron ....per doz..$1 35@$2 75
Wood .... " 2 75@ 4 75
Bailey's ....50&5%
Goodell's 15%
Stanley's Universal ....30&5%

Pruning. SHEARS.
Buckeye, No. 1 ....per doz..$6 50
" No. 2 .... " 8 50
California Pat., 9 in. " 4 25
" 10 in. " 5 00
Draw Cut, No. 3 .... " 15 50
" No. 4 .... " 18 50
Henry's Pat. 0 01 14 012
Per doz...$1.90 $2.50 $3.15 $3.50
Star ....per doz..$4 75

Sheep--No. BBA.
6 in. 6½ in. 7 in.
Reg.Grip..$11.00 $11.35 $12.00 doz.
Nar.Grip.. 11.20 11.00 12.15

Tinners'--See Snips.

SHEAVES—SLIDING DOOR.
In. 3 4 5
Common..Per set..$0.42 $0.48 $0.70
Hatfield's. " .. .75 1.00 1.60

SHELLERS--CORN.

Union ....per doz..$7 25

SHOT--See Ammunition.

SHOVELS AND SPADES.

Drain.
Iwan's Perfection 50%

Railroad, Etc.
Gold Hibbard's ....per doz.. $9 25
C. H. Conovers's .... " .. 7 75
Beckwith's .... " .. 7 75
Hickory .... " .. 6 25
Greenleaf's .... " .. 5 75
Columbus .... " .. 5 00
Ames' new list ....Discount 12½%

Coal.
No. 2 Ajax ....per doz..$5 25
No. 4 Golds .... " .. 6 25
Ames' new list ....Discount 12½%

SIEVES.

Champion ....per doz. $ .90
Hunter's Genuine .... " 1.10
" Imitation .... " .90
Tin Rim, 16 mesh plain wire" 1.35
Wood " 16 mesh plain wire" .80

SINKS.

Cast Iron.
Painted ....50&5%
Enameled, White .... 60-10&5%

Wrought Steel.
Painted, new list ....40-10&5%

SLEDGES--See Hammers.

SNAPS—HARNESS.

Champion 65%
German Pattern ....30&5%
Judd's Pattern ....60&10%@70%

SNATHS.

Double Ring, Bush ....per doz..$6 50
Patent Loop " .... " .. 7 00
" " Brass .... " .. 6 25

SNIPS--TINNERS'.

Hernisch's ....40&5%
National ....40&5%
P. S. & W. Co.'s ....35&5%

SOLDER.
See Metals, Column 1

SPRINGS--DOOR.

Perfect. Nos. 1 2 3 4
Per doz. 33c 38c 45c 48c

Reliance, Light $1.40, Heavy $2.20 doz.

Star .... " .90, " 1.30 "

Torrey's ....per doz..$1 35

Warner's— No. 1 No. 2
Per doz. 72c $1 45

SQUARES

Steel and Iron 70%
(Add for Bluing, $2.50 per doz., net.)

Mitre--Stanley's No. 12 ....40%

Try.
Stanley's No. 20, new list...30&10%
" Nos. 12 and 14 ....40%

Try and Bevel--Stanley's ....40&5%

Try and Miter.
Fox's ....per doz..$7 25
Winterbottom's .... " 50%

SQUEEZERS--LEMON.

Common Wood ....per doz..$0 72
Porcelain Lined, wood. " .. 1 30
Boss, tinned iron .... " .. 84
Pearl, nickel plated .... " .. 1 30
Star " .... " .. 1 60
Little Giant, tin'd iron " .. 4 25
King .... " .. 2 50
Drum .... " .. 4 50

STAPLES.

Blind—Barbed ....per lb. 9½@10c

Butter Tub .... " 8@8½c

Fence, less than carload.
Polished ....per 100 lb. $2 40
Galvanized .... " 2 80

Netting—Galvanized ....per keg 3 60

Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples ....85-10&5%
Extra heavy ....75&10%

STEELYARDS.
Discount 25%

STONES.

Axe.
Hindostan ....per lb. 5½@7c
More Grit .... " 9½c
Washita .... " 16½c

Emery ....60%@60&5%

Oil—Unmounted.
Arkansas Hard ....per lb. $2 00
Arkansas Soft .... " 1 15
Hindostan .... " 6¼@6¾
Lily White ....per lb 43c
Queer Creek .... " 14½c
Ouachita .... " 36c
Washita .... " 25c

Sythe.
Black Diamond ....per gro. $7 75
Clear Grit .... " 4 25
Gem Corundum .... " 7 50
Green Mountain .... " 4 20
La Motte .... " 7 00
Pikes Gen. No. 1, Ind. Pond., per gro 4 75
White Mountain ....per gro. 6 50
Willoughby Lake .... " 6 25
Red End .... " 3 15

STOPS—BENCH.

Hotchkiss' ....per doz. $3 60

STOPPERS—FLUE.

Common ....per doz. 42c
Crown .... " 48c
Gem, flat, painted .... " 72c
Gem, cor'd, decorated .... " 68c
Kirch's .... " $1 20
Peerless .... " 72c
Skinner's Common Sense " 96c

STRAPS.

Scoop ....per doz. prs. $1 80
Skate .... " " 60@70c

STRETCHERS.

Carpet.
Bullard's ....per doz. $3 90
Excelsior .... " 5 50
Malleable Iron .... " 70
Perfection .... " 6 00
King .... " 4 50

Wire.
N. S. Elwood's ....per doz. $5 75
O. S. Elwood's .... " 5 75
Little Giant .... " 5 50
Star Lever .... " 6 25
Star Tackle Block .... " 9 25
Warner's .... " 6 25

SWIVELS.

Malleable Iron ....per lb. 06c
Wrought Steel ....per gro. $4 50

TACKS.

American Cut ....90&5%
American Wire ....85&25&10%
Bill Posters Cut .... 90&40%
Blued Carpet ....90&15%
Tinned Carpet ....90&15%
Gimp ....90&30&10%
Upholsters' Cut ....90&40&5%
Upholsters' Wire ....90&25%
Double Pointed ....90&30%
Copper ....per lb. 27c
Canvas Nails ....75&5%
Clout Nails ....75&10&5%
Hungarian Nails ....80&5%

TAPES--MEASURING.

Asses' Skin ....40&10%
Bend Leather 25%
Patent Leather 25%
Lufkin's Steel 30%
Lufkins Metallic 30%

TENTS AND PAULINS.

Wall Tents 50%
Wedge Tents ....50&5%
Paulins 45%
Wagon Covers 45%

THERMOMETERS.

Tin Case ....per doz., 95c@$1 25
Wood Back .... " $1 75@ 9 00
Glass .... " 15 50

TIES.

Bale.
Single Loop .... 80&10%
All other kinds 70%

Cow--See "Chains."

TONGS.

Crimping—Packham's...per pair 50c

Gutter—P. S. & W. Co.'s ....15&10%

Pipe—Brown's 50%

Roofing—P. S. & W. Co.'s ....15&10%

TOOLS—SAW.

Atkin's Dexter ....per doz. $4 25
Atkin's Excelsior .... " 6 25
Disston's Universal 40%
McDonald's 33⅓%

TRAPS.

Game.
Newhouse 50%
New Victor 80%

Mole—Reddicks ....per doz. $5 75

Mouse and Rat.
Wood Choker ....per hole 10c
Tin Choker .... " 11c
Delusion ....per doz. 85c
Imitation Sight, Rat .. " 80c
Marty Rat .... " $6 75
Marty Rat, Imitation .. " 3 75
Marty Mouse .... " 3 15
Marty Mouse, Imitation " 2 10
French Automatic .... each $3 60

Fly.
Balloon ....per doz. $1 10
Harper's .... " 1 25

TROUGH—EAVE.

Eastern .... Discount 75&16⅔%
Central .... " 75&12½%
South Western .... " 75%
Missouri River .... " 75&12½%
Southern .... " 75&12½%

TROWELS.

Brick.
Standard 30%
Brade's ....10&7½%
Disston's 30%
Rose's 25%

Plasterers'.
Standard 33⅓%
Disston's 30%
W. & McP 25%

TRUCKS.

Bags ....each $1 70
Handy .... " 1 50
Warehouse ....60&5%

	No. 1	2	3
Half Ironed	$2.60	$3.40	$5.00
Full Ironed	3.90	5.75	6.75

TUBS-WASH.

	No. 3	2	1	Ex. large
Standard, per doz.	$5.25	6.25	7.25	9.75
Dowel "	5.60	6.60	7.50	10.00
Cedar "	6.50	7.50	8.25	
Indurated "	7.20	7.95	9.45	11.70

Galvanized.

	No. 1	2	3
Per doz	$5.25	5.75	6.50

VISES.

Bonney's 30%
Cheney's 30%
Parker's Oval Slide ....50@50&10%
Parker's Parallel ....15@30%
Parker's Victor 10%
Parker's Combination ....50&10%
Solid Box ....50&5%
Adam's Mechanics' ....each $9 50

WARE,

Cast-Iron Hollow.
Ground .... 40, 10&2½%
Unground ....50, 10&2½%
Extra Finished 40%
White Enameled ....40&5%
Muslin Kettles 65%

Enameled.
Adamant, one coat, 70&10%@75&10%
The manufacturers divide this ware into two classes, which take different discounts, noted above.
Chrysolite, three coat ....40&5%

WASHERS.

Leather.

	In. ⅜	1	1⅛	1¼	1⅜
Nut, per C	16c	17c	19c	25c	23c
Collar, per C	35c	40c	40c	43c	

Wrought Iron.

	In. ¼	5-16	⅜	½	⅝	¾ to 1
Per lb.	08c	07½c	06¼c	04c	04c	03¾c

Wrought Steel.

	In. ¼	5-16	⅜	½	⅝	¾ to 1
Per lb	.09c	08c	7½c	05¼c	05c	10½c

WEDGES.

Ax ....per dos. 30c
Galling ....per lb..10½c
Saw .... " .. 8½c

Wood Choppers.
Lake Superior and Oregon, Pat ....per lb.. 9½c
Reg. Pattern, Steel... " .. 4 c
Truckee " " ... " .. 4¼c

WEIGHTS.

Hitching ....per lb..3½c
Sash--F.O.B. Chicago..pr ton..$22.50

WHEEL BARROWS.

Common Railroad ....per doz..$16 00
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray.. " .. 26 50
No. 04 Steel Dirt ... " .. 52 00
No. 04½ " " ... " .. 56 00

WHEELS.

Corundum ....70&10&5
Emery ....75&5%
Well.

	In. 8	10	12	14
Per doz	$1.90	$2.20	$3.00	$5.50

WIRE.

Barbed.	Painted.	Galv'd.
Carloads...pr 100 lbs..	$2.50	$3.80
Less than car " ..	2.60	2.90

Brass.
In coils 20%
In 1 lb. spools, new list ....50&10%

Broom--Tinned ....60&10&10&10%

Cable—Same price as Barbed Wire.

Copper.
In coils ....20&10%33⅓%
In 1 lb. spools, new list ....50&10%

Fence--Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.10
Nos. 6 to 9, Galv'd... " 2.20

Hair--New list ....50&10%

Market.
Bright, full bdles ....70&10%
Bright, broken bdles 70%
Coppered, full bdles 70%
Coppered, broken bdles ....65&10%
Tinned, full bdles ....70&5%
Tinned, broken bdles ....65&10%

Picture.
In coils ....80%@80&10%
In 5 lb. spools ....per lb..26c

Plain—Small lots $2.00
Car lots 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard 60%
Alligator ....65&5%
Always Ready ....40&10&5%
Bemis & Call 40%
Coe's Standard ....40&10%
Girard's Agricultural 75%
P. S. & W. Co.'s Agricultural 75%
" " " Knife H'dle..50&5%
Wescott's "S" 33⅓%
Malleable "S" ....per lb. 05½c
Malleable ....per lb. 05½c
Stillson Pipe ....60&5%
Trimo " 60%

WRINGERS.

Clothes.
Nos. 2&110, Guarantee, pr doz. $26 00
No. 150, Sunshine .... " 18 00
No. 130, Mendota .... " 18 00
No. 12, Success .... " 16 00
Blue Bell, Ball Bear'g. " 25 00
No. D 110, Domestic .... " 22 50
No. E 300, Empress .... " 25 50
No. 122, Bicycle Ball-bearing .... " 27 00
No. 122, Swan .... " 27 00

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—In Pueblo, Colorado; best town in the state; good clean stock general hardware; will invoice about $9,000. Also good tin shop in separate building; reasonable rent. Most centrally located hardware store in the city. Will sell both or either. Address Andrus-Ferguson Hardware Co., 235 W. Union St., Pueblo, Colo. 19

For Sale—An up-to-date plumbing business in one of the best cities in Arkansas. One of the largest in the city. Owner wishes to retire from business. A snap for someone. Write to-day. Robt. Dawson, Ft. Smith, Ark. 1-19

For Sale—Established tinning and cornice business at a bargain. In large county seat containing 1,500 population. Will give time on part or will take real estate for part and balance cash. A snap for tinner or cornice man who is willing to get into a good paying business. State full particulars in first letter. "Box 1135," Waterloo, Ia. 19

For Sale—Stoves, large burring machine with standard, nearly new, $6.00. Square, condenser; candle M stakes at your own price. Address Hardware, Larrabee, Iowa. 19

Wanted—To hear from some wholesale hardware firm or stove company wanting an experienced salesman to represent them after January 1, 1904, in all or part of Iowa. Can furnish bond and reference if required. Address "A," 105 West Lincoln St., Marshalltown, Iowa. 19

For Sale—My stock of hardware, plumbing and heating business in 1,400 town, northeastern Iowa; two stores; keep two and three men year round; have made it all here in five years. Good reasons. Stock, $4,500. Address P. A. W., Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 18

For Sale—A good acetylene gas generator patent, or a good clean stock of hardware, stoves and tinware, in county seat; stock $8,000; cannot handle two businesses satisfactorily. Address T. H. Kiniry, Beloit, Kas. 18

For Sale—A good clean stock of hardware with a well paying tin and furnace business in one of the best cities in western Ohio; stock and tools invoice $2,600. Address I. N. W., Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 18

Wanted—Stock of hardware in exchange for grazing land in Morton county or farming land in Ward county, all in North Dakota. For particulars address Box 315, Alden, Minn. 18

For Sale—For cash in a lively country town of northern Iowa, a clear stock of hardware with well paying tin shop. Stock and tools about $3,000. Also store building and dwelling. Address "H. S.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 18

For Sale—A good, clean stock of hardware with tin shop in connection, in a prosperous town and splendid farming community in northern Illinois. Stock and tools will invoice about $2,500. Address D. H. R., care The American Artisan, 69 Dearborn street, Chicago. 17

For Sale—A money-making hardware, buggy, harness and implement business, located in county seat of finest county in western Indiana. Doing large business. Good reason for selling. Stock, $7,000; can be reduced in short time. Don't answer unless you mean business. Address "Indiana," care The American Artisan, 69 Dearborn street, Chicago. 17

Partner Wanted—An established job work and furnace company in one of the best cities in Colorado incorporated for $5,000.00, desires to associate with an energetic up-to-date mechanic or business man. An investment of $1,000.00 required. Address, Colorado, Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 16

For Sale—One-half interest in a hardware store; good town in northern Colorado; population, 9,000; reason for selling. Address "Last Chance," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 16

For Sale—A long established agricultural implement, wagon and carriage business, situated on good corner facing public square in Huntley, Ill. Fine large building, in good repair, and a good stock of goods including wagon repair outfit. Will sell for cash or give credit on part of purchase price. Address A. M. Disbrow, Huntley, Ill. 16

TINNERS' TOOLS.

For Sale—One 7 ft. Robinson cornice brake in first-class condition. Klondike Incubator Co., Des Moines, Ia. 18

For Sale—Complete set of tinner's tools; or will rent tools and shop. Good opening for tinner that understands plumbing and steam fitting. Address Lock Box 22, Elkader, Iowa. 16

Wanted—1 30-in roller with 2-in. rolls; 1 stovepipe crimper and beader, 1 pair Reese's roofing tongs, 1 pair gutter tongs; 1 pair 9-in. bench shears. Write, stating condition and best cash price. E. A. Stephenson Hdw. Co., Lowell, Iowa. 15

Wanted—A good, second-hand cornice brake. W. E. Campbell, Hartford City, Ind. 14

HELP WANTED.

Wanted—A good sober tinner, one who can do plumbing and hot water heating. Good steady job for a competent man. Write, giving reference and wages expected, Warren Hdw. Co., Portage, Wis. 19

Wanted—At once, young man to learn tinner's trade; we also do plumbing, hot water and hot air heating. Will consider an application from one who has worked at the business a year. Address "Helper," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 19

Wanted—Three first-class stove mounters. The Foster Stove Co., Ironton, Ohio. 19

Wanted—A first-class all round tinner and furnace man who has some knowledge of plumbing; one able to make estimate and take charge of shop. Nine hours per day. State wages wanted. Address Stoelzle & Compton, Carbondale, Ill. 19

Wanted—Two good tinners who understand furnice work and general jobbing; work year round. McGuire Bros., Rockford, Ill. 19

Wanted—Experienced stove salesman to sell a trade mark line of ranges in Kansas, Wisconsin and Minnesota. State experience, last whom with and salary expected. One with previous experience in above territories. Address M. I. R., Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 19

Wanted—Stove and furnace salesman for western territory. Must be able to produce evidence of ability. Address "Stove Salesman," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 18

Wanted—Two first-class tinners with knowledge of furnace work can secure permanent positions with Brand Stove Co., Milwaukee, Wis. 18

Wanted—A good tinner and experienced helper. F. J. Wehmeyer, 1435 St. Louis Av., St. Louis, Mo. 18

Wanted—At once, first-class tinner. Three Manley Bros., Harvard, Ill.

Wanted—At once, a good all round tinner. One who can do some plumbing. A steady job and good wages. New York Hardware Store, Perry, Oklahoma. 17

Wanted—A good tinner at once; steady work and good wages. Come at once. Maher & Son, Preston, Ia. 17

Wanted—By November 1st, a good tinner and furnace man; one who can do everything required in a tin shop. To a good sober and industrious man we will give work the year round. M. Reinhardt's Sons, 205 S. Sangamon street, Lincoln, Ill. 17

Wanted—Experienced galvanizer who thoroughly understands galvanizing pails, tubs and metal ware, to take charge of department for good company in northern Indiana section. Must be reliable man with a good record. Address Box A, care The American Artisan, 69 Dearborn street, Chicago, Ill. 17

Wanted—Salesman calling on the hardware trade, to sell a first-class washing machine. Will pay a liberal commission. Address "Washer," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 16

Wanted—Two reliable tinners or sheet metal workers; must be competent, sober and willing to work. Good wages and steady employment year round to right men. Haag-Laubach Roofing & Cornice Co., St. Paul, Minn. 16

SITUATIONS WANTED.

Situation Wanted — First-class boiler and furnace salesman, wishes position January 1, 1904. Address "H. Q.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 19

Situation Wanted—As tinner and hardware clerk. Experienced tinner, machine expert and pump man. References exchanged. Can accept position after January 1, 1904. I want all the work I can do and good pay. State wages. Address Lock Box 15, Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 19

Situation Wanted—About January 1, 1904, in Idaho, Oregon or Washington, by an all-round plumber and sheet metal worker; competent of installing heating plants of all kinds. Desire to engage with good reliable firm. Address "Jack," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 19

Situation Wanted—As traveling salesman for a sheet metal house or furnace house, by tinner and clerk. Have twenty years' experience. Address "C. L. E.," Albert Lea, Minn. 19

Wanted—A good selling line of refrigerators for Denver and surrounding territory. Address Fred C. Voss, 1648 14th street viaduct, Denver, Colo. 17

Situation Wanted—On per cent; territories preferred, or will start a shop in a city where first-class tinner can make a legitimate living. This is a business proposition to the trade. Geo. J. B. Wright, P. O. Box 57, Orange, Tex.

Wanted—Position with some hardware firm as bookkeeper and salesman, 15 years' experience in hardware store. Don't drink, smoke, chew, or gamble; can furnish good references. Own and operate typewriter for use in the office. Address Care Box 53, Winnebago City, Minn. 15

Wanted—A well paying permanent position as salesman in retail hardware store by young married man; German American; over 10 years' experience in the business; good bookkeeper; no bad habits. Please state wages paid in first letter. Address P. O. Box 98, Knox, N. D. 15

SPECIAL NOTICES.

WANTED!

SITUATION—By exerienced salesman, with large acquaintance throughout the Central West with the hardware trade. Best of reference. Address **A. B. X.**, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4-19

WANTED! Stock of Hardware, Buggies and Implements

For Good IMPROVED FARM.

Address "IMPROVED FARM," care THE AMERICAN ARTISAN, 69 Dearborn St. Chicago, Ill. 4-19

PLUMBING AND HEATING BUSINESS FOR SALE

in County seat and College town of 3,500. Good paying business and good location. Failure of health reason for selling. Write us, we can interest you. Address "Box R," Indianola, Iowa.

PROPOSALS will be received at the Bureau of Supplies and Accounts, Navy Department, Washington, D.C., until 12 o'clock noon, November 10, 1903, and publicly opened immediately thereafter, to furnish at the navy yard, New York, N. Y., a quantity of incandescent lamps, illuminating outfits, cable, wire, conduit and fittings, tape, electrical supplies, **bolts**, and **nuts**, **rivets**, hair brushes, deck scrubbing brushes, cotton twine, cotton and flax canvas, Russian flax and crash, cotton undershirts, bleached cotton drill, burlaps, white muslin, **kitchen utensils**, stateroom crockery and rings, lavatory fittings, glass, **buckets**, **wire**, **screws**, **nails**, **locks**, **miscellaneous hardware and hand tools**, **rivet forges**, chain blocks, pipe sets, crucibles, lamps and **lanterns**, leather and leather belting, ash, cedar, spruce, white pine, yellow pine, hewn and sawed timber, **brass**, **copper**, **steel**, **iron**, **solder**, **pig and sheet tin**, **sheet zinc**, **sheet lead**, gum gasket, steam hose, white lead, Venetian red, **linseed oil**, sperm oil, concentrated lye, rosin, glue, phosphide of calcium, pipe fittings, **hose couplings**, copper and steel tubing, **valves**, tinned pears and peaches, stationery, bottles, **range sections**, **boat stoves**, and athletic outfits. Blank proposals will be furnished upon application to the navy pay office, New York, N. Y. H. T. B. HARRIS, *Paymaster General, U. S. N.* 10-16-03

WANTED.

Salesman to sell Gas Heaters as a side line. Address "Heater," care The American Artisan, 69 Dearborn St., Chicago. 2-18

WANTED

An experienced tinner on refrigerator work. Would let contract by piece or day work. 2-18

ILLINOIS REFRIGERATOR CO.
Morrison, Ill.

NOTICE.

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and continent. References furnished.

ADDRESS

EXHIBIT & TRADING CO.

Main Office, 72 Henry St.

LIVERPOOL . . ENGLAND.

"GENEVA-CRUCIBLE"

THAT'S OUR BRAND OF STEEL GOODS—
IT SHOULD BE YOURS—

Few makes equal and none surpass them in quality and finish
Won't you let us tell you more about them in a letter?

NORRIS & LORING HARDWARE CO.

EXCLUSIVELY WHOLESALE CEDAR RAPIDS, IA

Specialty Salesmen

to sell patent 5-gallon can for oil or gasoline, as a leader or as a side line; one salesman is making $10 to $15 a day; must sell retail trade and cover territory closely; write for particulars. J. A. HARPS MFG. COMPANY, Greenfield, Ohio. 4-18

I WOULD LIKE to have a good sheet iron worker in each town in the U. S. manufacture for me a patent article to supply the trade in his town and neighborhood. Device made of Galvanized Iron; can be built in any good sized tin shop; good demand for it; good profit in making it; can be worked into a good business. Address

R. M., P. O. Box 333, Milwaukee, Wis.

AN EXCEPTIONAL CHANCE

is offered men with money to invest in a Stove Foundry that finds it impossible to fill orders for its goods and needs more capital. Present capitalization has paid a very heavy dividend.

Address in confidence,
OPPORTUNITY.

CARE OF THE **AMERICAN ARTISAN,**
69 Dearborn St. CHICAGO.

FOR SALE.

Stock Hardware, Paint, Oils and Stoves. $9,000 to $12,000, located midway between New York and Buffalo, doing retail, jobbing and mail order business; an unusual opportunity; owners desire to retire. Write for particulars. Address, Builders' Hardware, care American Artisan, 69 Dearborn St., Chicago, Ill.

PATTERN LETTERS
WE HAVE THEM
SIZES, ONE EIGHTH TO TWO INCHES.
ROMAN, ROUND FACE GOTHIC, SHARP FACE GOTHIC, HAIR-LINE GOTHIC, FLATTENED FACE GOTHIC, ANTIQUE POINTED AND REVERSED
NAMES FOR BRANDING IRONS.
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211 N. THIRD ST. ST. LOUIS, MO.

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THE ROBT. AITCHISON PERFORATED METAL CO.
303-305 DEARBORN STREET, CHICAGO, ILL.

MAIL ORDER DEPARTMENT
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ADVERTISING SPECIALTIES,
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SEND FOR CATALOGUE B.

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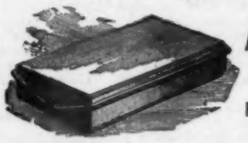
Size 3x4¼ in. Patented July 28, 1903.



Price 15c
ALL DEALERS SELL THEM
F. REISSMANN,
West Point, N.Y.

WEBER JR.
Gasoline Engines
are the outgrowth of 19 years of engine building. Not approached for strength, safety, simplicity or width of duty. Valuable for a score of farm duties. Any boy can run them. 2½ full horse power at less than 5 cts. per hour. Tested and ready for action upon arrival. Made to fit farmers' needs. Other sizes up to 300 h. p. Write for free catalogue.
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Household Specialties. Dealers write for illustrated catalogue showing new goods and quick sellers. L. Cline Mfg. Co. 1239 Wabash Avenue, Chicago.

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For anything in the way of cheap printing machinery, fancy stationery, chromo-litho pictures, etc., etc., we are prepared to accept agency. We could also supply coin mats, plumbago, mica, precious stones and Ceylon tea. Samples, catalogues and terms wanted and given. Correspondence respectfully solicited.

J. WICKRAMANAYAKA, Kalutara, Ceylon.

"The man who whispers down a well
About the goods he has to sell,
Won't reap the golden, gleaming dollars,
Like one who climbs a tree and hollers."

DIXON

DIXON'S Stove Cement will repair the lining of any stove and will pay for itself many times. Ask for booklet 13-L.
JOSEPH DIXON CRUCIBLE COMPANY,
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UNION BRICK HANDLER

A Money Saver.

Full size sample.

Delivered-Express

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The "STAR" Ventilator

Storm-Proof. Effective. For ventilation of all kinds of buildings both public and private.

MERCHANT'S METAL "SPANISH" TILES AND "GOTHIC" SHINGLES

Are the most Ornamental Roofing made in metal. We are makers of **High Grade Roofing Tin.**

Illustrated Booklets of TILES and VENTILATORS will be mailed free upon application.

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Roof Ventilators

made in improved designs and so constructed they never leak. The largest concerns in the U. S., England, Russia, China, Japan, Australia, and the entire world use the New Improved "PAN-COAST" Ventilator.

If your dealer does not handle them, write us; we are at your service.

Manufactured by the

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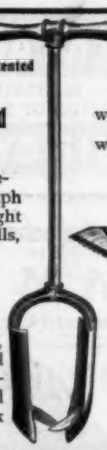
OFFICE and FACTORY.... **233 S. Fifth St. Philadelphia**

Iwans Patented **Improved Post Hole and Well Auger**

For fence, telephone, telegraph and electric light post holes, wells, prospecting, earth testing, plumbing, etc.

Sizes: 4, 5, 6, 7, 8, 9 10 and 12 inch, regularly made and carried in stock at all times.



IWANS Serrated Hay Knife

with waving edge. Adjustable handles with malleable iron or wood grips.

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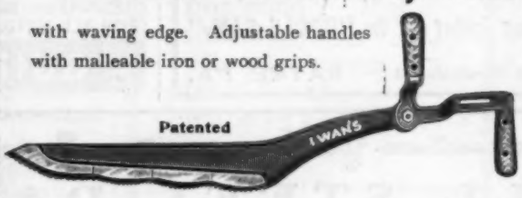


Cutting edge of four serrated sections of high grade tool steel rivited to strong malleable iron bar. Packed in boxes of one-half dozen and one dozen.

Sold by Hardware and Implement Jobbers everywhere. Complete discount sheet on entire line mailed to the trade on request.

IWAN BROTHERS Mf'rs of Hardware Specialties **Streator, Ill.**

GRAY'S PERFECT SKYLIGHT PATTERNS

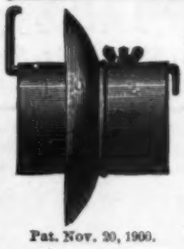
FOR HIP SKYLIGHTS
GABLE "
SINGLE PITCH "

With 6 to 8 and 10 in. ventilator patterns and skylight chart giving the length to cut hip and rafter bars for any sized skylight up to 24 ft. wide, for ¼ pitch skylights.

Full set of Patterns and Chart, prepaid, $3.50.

G. L. GRAY - - 53 W. 111 St. New York

The HAYLOR HOLD FAST STOVE PIPE



The problem of holding stove pipe securely in the flue hole is solved by using

The Haylor Hold Fast Stove Pipe.

Pat. Nov. 20, 1900. **Therefore the demand.**

A Fast, Ready Seller on Account of its Merits : :

Made of the best of materials, both Woods smooth and Planished No. 26 gauge iron. The Haylor Hold Fast Stove Pipe is 9½-in. long, fitted with fastening device, and beautifully designed, gilded collar, which measures 10½ in. in diameter for six-inch pipe and 11½ in. for seven-inch pipe. Packed half dozen complete, pipe, collar and fastening device to the crate.

Dealers do not pay for the support of our traveling men. We have none. Write for catalogue and prices.

STUBER & KUCK,

Manufacturers of Pieced Tinware and Specialties,

PEORIA, ILL.

It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

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REPAIRS FOR ALL STOVES and FURNACES

Stove Rods, Paste, Stove Putty, Stove Knobs, Pipe Dampers, Mica, Etc.

Wm. T. Dust Co. . DETROIT.

The GEO. W. COPE,

Stove Pattern Works

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DETROIT, MICH.

The Stove Repair "Tip" Is

"BRAUER"

316-318
NORTH THIRD ST.
ST. LOUIS MO.

THE GOBEILLE PATTERN CO.

We design and make beautiful and workable

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For Stoves, Heaters, Boilers and all Cookers

CLEVELAND, OHIO

Every Dealer

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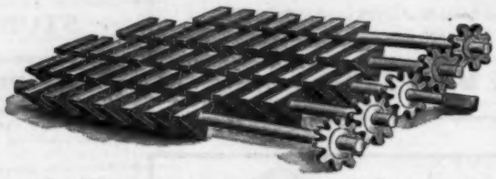

Our Stove Repair Book contains 450 pages. Our Furnace Repair Book contains 300 pages. We can furnish repairs **promptly** for any stove, range or furnace.

J. B. MORRIS FOUNDRY CO.

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STOVES—RANGES—FURNACES

SEND FOR CUTS.

Mersfelder Pattern Works

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UNCLE SAM DAMPER! THE PIONEER STEEL DAMPER

FURNACE PIPE DAMPER.

The handle is enameled wood, will not heat, rigidly clamped and cannot come off. The spring is not affected by heat. The stem is a steel rod, all one piece and nothing to fall apart; pointed and easily driven through the pipe. The Damper Plate is made of cold rolled pickled steel, corrugated to stiffen it and to prevent warping. We call special attention to lightness and strength of these Dampers and their desirability for **FURNACE** pipes.

"The Difference in Weight Pays the Freight."

Ask Your Jobber for the "UNCLE SAM."

SAYRE STAMPING CO. Sole Manufacturers SAYRE, PA.

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STOVES, WOOD & METAL

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DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS

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YANKEE ALL STEEL DAMPER

The Best and Easiest Damper to get in or out. Cheapest Damper made. Made also in Oval Shape.

HOT AIR DAMPER.

Steel Rod flattened and turned over handle.

Enameled Wood Handle, can't get out.

Spring and Washer.

This pin keeps washer and spring on the rod.

¼ inch cold-rolled steel rod. Can easily be driven through pipe, making small and same size holes on both sides.

Pin at this point with the one further up on the rod, hold the plate firmly, because they are made with large, elongated head. Steel damper plate.

SMOKE PIPE.

You Can't Afford to Make Dampers When You Can Buy the Yankee.

Smoke Pipe Sizes,	3	4	4½	5	5½	6	7	8	Hot Air Sizes,	6	7	8	8½	9	10	10½	11	12	12½	14	15
PER DOZ.,	.85	.85	.85	1.00	1.10	1.20	1.50	2.15	PER DOZ.	1.20	1.50	2.15	2.35	2.55	2.80	3.05	3.30	3.50	3.75	5.00	6.00

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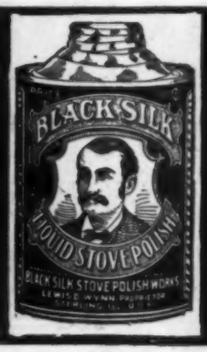
See The Name on the Box.

Not sold to department stores or mail order houses, but only through regular jobbing and retail trade whose orders are solicited.



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Don't let your Oven Thermometers be the kind that tries the cook's patience or hurts her eyes to read. Our No. 460 isn't that kind—we have the "know-how." Send for circulars and sample—we want to talk business.

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May differ on some things, but not as to the Superior Quality of

Polishers and Platers Supplies

Manufactured by

F. B. STEVENS

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Send for Samples and Prices.
BOTH ARE RIGHT.

J. F. LEWIS, Cisco, Ill., *Writes:*
"I cannot get along without The American Artisan"

Everything in **STOVE, RANGE AND FURNACE REPAIRS**

Western Agents { BURDETT, SMITH & CO.
CHAMPION STOVE CLAY

LARGE STOCK ON HAND

J. L. MORRIS STOVE REPAIR CO.

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"It is true that advertising will not put merit into poor merchandise, but good merchandise often becomes poor for the want of good advertising."

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BARKEEPER'S FRIEND.

Marble, Glass, Nickel, Brass, Copper, Tin and German Silver

can all be cleaned and polished with it easier than with anything else.

Price 25c per lb.

Let us send you a free sample.

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FOR SALE BY JOBBING TRADE.

STYLE NO. 2.
Size 2X2¼X2⅝ About 180 in a cubic foot.

Artificial Coal or Incandescent Fuel

For Gas Stoves and Basket Grates.

Contains the best features of the modern gas fire and the old time open fire place.

Samples Free by Mail—RED, WHITE, BLACK.

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TAUNTON, MASS.

Sheet Metal Architectural Ornaments, Statuary, Etc.

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Roofing, Corrugated Iron, Galvanized Iron, Corrugated Conductor Pipe, Finials, Weather Vanes, Cresting, Etc., Sheet Copper.

Galvanized Steel Tanks for all Purposes.

FRIEDLEY & VOSHARDT SEND FOR CATALOGUE A 21
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THE LONGEST IN THE WORLD. Ten Feet (120 inches) Long Without a Seam. No Soldering Required.

OUR SPECIAL LENGTH

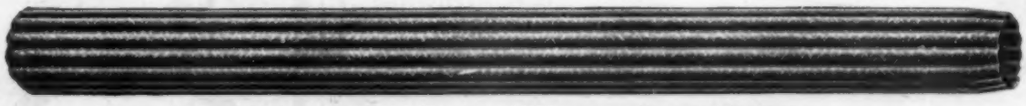
EAVE TROUGHS AND CONDUCTORS

There may be some very good eave troughs and conductor pipes on the market. Some of them may possess advantages one over another. None of them, however, possess the advantage of special length, as ours do. And besides, our eave troughs and conductors have all the good advantages of the best eave troughs and conductors on the market, with this most important feature added.

We originated this idea of extra length because there was a universal demand for eave troughs and conductors with this feature, and thousands of consumers will testify to its value in both money and time saving qualities. We have a very large stock of eave troughs and conductors and mitres, ends and drops, hangers, steel and wire elbows and shoes, cast iron shoes, hooks and also sewer connections, on hand, and can assure the consumer that his order will be promptly shipped. We invite every interested consumer to write us for further information in this line, or ask for our catalogue.

THE BERGER MFG. CO. CANTON, OHIO.

NEW YORK, 210 E. 23rd St. BOSTON, 176 Federal St. PHILADELPHIA, 1218 Filbert St. ST. LOUIS, 19 & 21 S. Main St.



Ten (10) Feet Long, Without a Cross Seam.

PLECKER'S CORRUGATED EXPANDING CONDUCTORS.

Made of Galvanized Iron in Ten-Foot Lengths without a Cross Seam. Will not burst when full of ice.

CLARK, QUIEN & MORSE, Peoria, Ill.

La Crosse Steel Roofing and Corrugating Co.

LA CROSSE, WIS., Manufacturers of

EAVES TROUGH, CONDUCTOR PIPE

Elbows, Mitres, Hangers, Cut Offs, Roofing and Siding Material

Our make of goods the very best. Send us your spring order. Prices the very lowest. Prompt shipments.

Waiters

At a swell function don't hustle any faster opening wine than our extensive shipping force do in hustling out orders for **Eaves Trough, Conductor Pipe,** etc.

GARRY IRON & STEEL CO.

CLEVELAND, OHIO

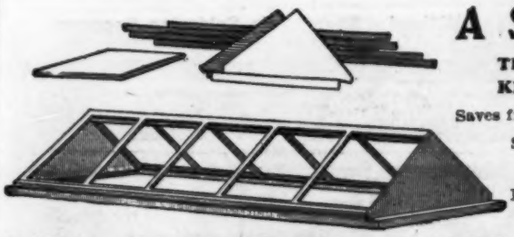
YOUNG'S COMBINATION

STRAINER AND CUT-OFF

Body in one piece; cannot break in two.
No levers or springs to break off.
A strainer perfect in construction which ejects all refuse.
All parts rivited and soldered.
Is practically indestructible.
Sold by all jobbers.

OPEN CLOSED

YOUNG MFG. CO., Bellevue, Iowa



A SKYLIGHT

That can be Shipped KNOCKED DOWN..

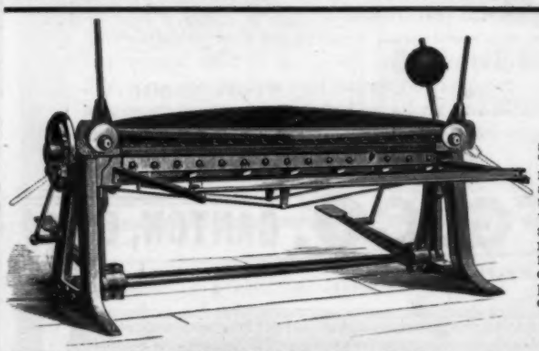
Saves freight, saves cost of crating.

Saves troublesome repairs, and is guaranteed in every respect.

Let us send you our **Skylight Booklet** and quote prices.

THE GALESBURG CORNICE WORKS,
GALESBURG, ILLINOIS.

KEENE'S COMBINED SQUARING SHEAR AND CORNICE BRAKE.



Designed for Cornice and Skylight work.

It has an unlimited squeezing power for locks. The upper jaw is dished to make folds. The shear is attached to the back of the brake and is operated with levers. The blades are attached in such a manner as not to interfere with the usual work of the brake. All the parts are well made and cannot get out of order.

Write for catalogue.

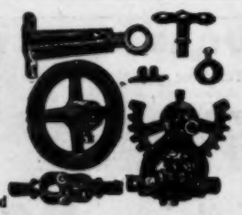
GEO. C. KEENE & CO., Cincinnati, O.

H. WEISS & CO.

20 Cliff St., New York.

SKYLIGHT GEARING AND CHAIN LIFTS

Tinsmiths' and Plumbers' Tools
Cornice Makers' Tools
Coppersmiths' Tools
Pipe Threading Machines
Second-hand goods bought, sold & exchanged



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PRESSES. DIES.

Rolls Seamers. Sheet Metal Tools.

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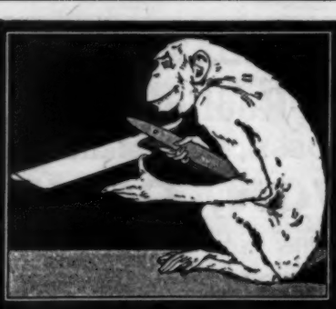

Monkeying with edged tools is proverbially dangerous, and one of the most fatal of all edged tools in the building trade is poor roofing plate. If you stick to the old and reliable

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you need have no fear of results. This is a perfectly reliable plate of the highest grade, made by the good o'd hand dipping system and covered with a rich and even coating. There are no wasters sold under this brand.

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MADE BY THE **MF** PROCESS.

The **MF PROCESS** of manufacturing roofing tin originated in South Wales two generations ago; from that time to the present the product of the **MF PROCESS** has been the most reliable and hence the **MOST FAVORED.**

Recently the **NEW METHOD** by which terne plates are finished in a manner that gives further protection against corrosion has been combined with the **MF PROCESS.** The result of this combination is the **U. S. EAGLE N. M.**

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AMERICAN TIN PLATE CO.

BATTERY PARK BUILDING,
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What is the Relative Cost

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of using the No. 1 Fire Pot and the "Just as good as No. 1" kind some dealers sell?

The No. 1 Fire Pot has many points of advantage which enable the user to do more and better work, saving at least one hour each day during the life of the fire pot (900 working days) *saving 900 hours at 35c per hour —$31.50. Can you afford to use the "Just as good" kind even if it is given to you?* Buy a No. 1 Fire Pot. Your money back if it does not please.

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Enameled Steelware and Tinware is not all alike. If it was you could choose it in the dark, and come out on the sunny side every time. But a dealer must be careful—the pitfall of poor quality is always open and you may fall into it if you don't choose the make that "toes the mark."

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Direct from the manufacturer? manufacture all kinds and sizes, all with pieced covers.

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Packed ¼ doz. and ½ doz. crates. I take and ship orders from ½ doz. to 100 doz. on short notice.

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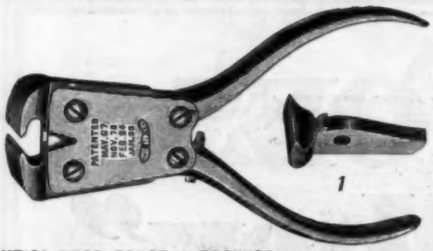

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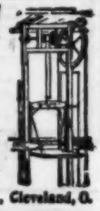

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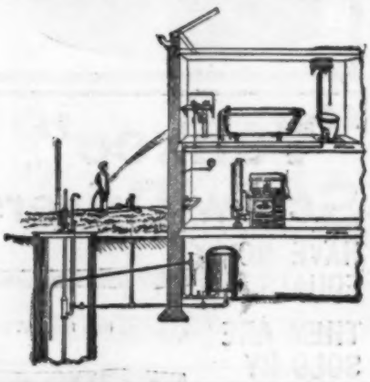

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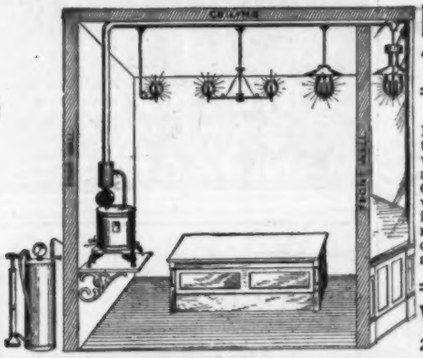

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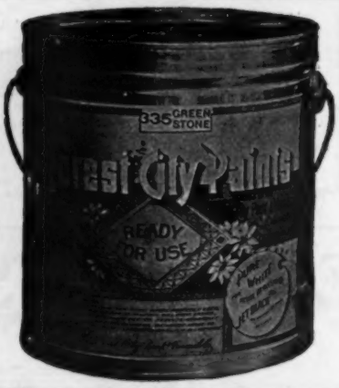

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of an established reputation is far the easiest and most satisfactory for a dealer to sell. Our paints are right in quality and price. Why not write for catalogue and terms?

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THEY ARE SOLD BY LEADING JOBBERS.

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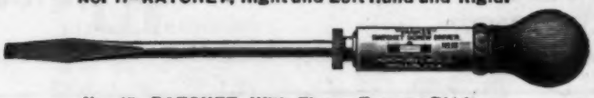

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¶ It enables you to sell goods to a *German*, a *Scandinavian* or *any* other foreigner who, even though he cannot speak English, can *point* to what he wants.

¶ It improves the appearance of your store *100 per cent;* enables your salesmen to spend their time *selling* goods instead of *hunting* for them, and will *pay for itself in one year.*

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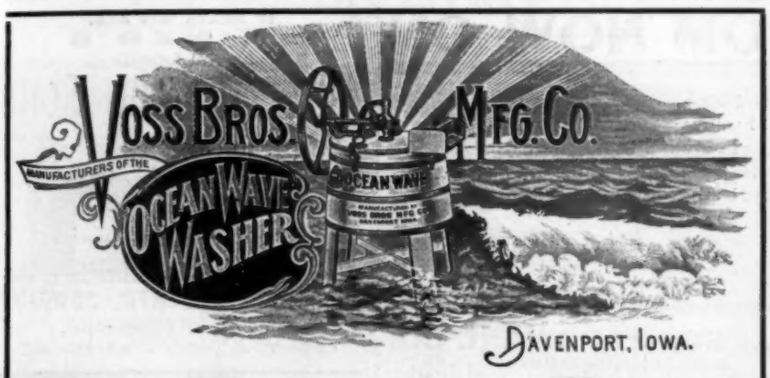

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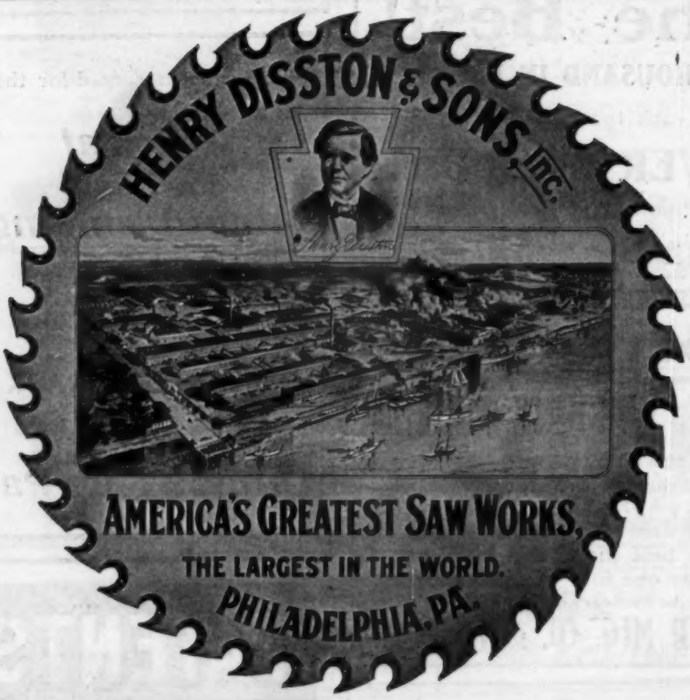

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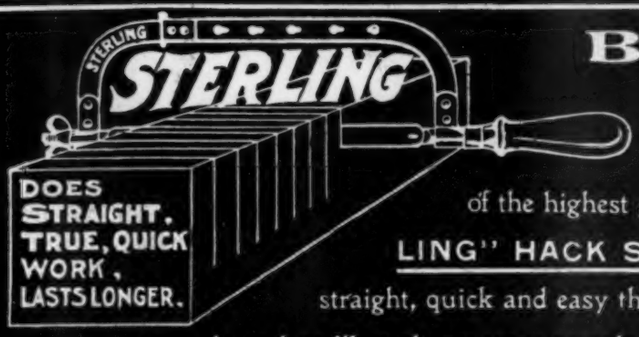

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of the highest grade, no other gets into "STERLING" HACK SAWS A trial will convince how straight, quick and easy they cut. Tell us what kind of work you do and we'll send you some sample blades to try.

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We make a complete line of Hollow Back Shovels, Scoops, Spades. "Never-Break" Spiders, Griddles, Kettles, etc.

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Comprise patterns for a full line of tinware, in numerous sizes, square and round elbows, cut-offs, etc. These full-size patterns, numbering upward 100, are printed on manilla paper, from which they are readily transferred to heavy sheets and cut out ready for use. The list contains the following patterns:

Tea Steeper
Two-pint Tea Pot
Three-pint Tea Pot
Four-pint Tea Pot
Five-pint Tea Pot
One-quart Coffee Pot
Two-quart Coffee Pot
Three-quart Coffee Pot
Four-quart Coffee Pot
Five-quart Coffee Pot
No. 1 Coffee Boiler.
No. 2 Coffee Boiler
No. 3 Coffee Boiler
Lamp Filler
One-pint Dipper
One-quart Dipper
Two-quart Dipper
Four-quart Flaring Pail
Six-quart Flaring Pail
Eight-quart Flaring Pail
Ten-quart Flaring Pail
Twelve-quart Flaring Pail
Fourteen-quart Flaring Pail
Ten-quart Dish Pan
Twelve-quart Dish Pan
Fourteen-quart Dish Pan
Sixteen-quart Dish Pan
Dinner Bucket
Five-inch T-Joint
Six-inch T-Joint
Eave Trough Mitre Joint
"Snap" 2-inch Conductor Elbow
Cullender
Two-inch Square Elbow
Two-and-a-half-inch Square Elbow
Three-and-a-half-inch Square Elbow
Four-and-a-half-inch Square Elbow
Five-and-a-half-inch Square Elbow
Six-and-a-half-inch Square Elbow
Seven-and-a-half-inch Square Elbow
One-pint Funnel
Two-pint Funnel
Three-pint Funnel
Four-pint Funnel
Small Milk Strainer
Large Milk Strainer
Ten-quart Milk Pail Breast
Fourteen-quart Milk Pail Breast
Two-inch Four-piece Round Elbow
Three-inch Four-Piece Round Elbow
Four-inch Four-Piece Round Elbow
Five-inch Four-Piece Round Elbow
Five-and-a-half-inch Round Elbow
Six-and-a-half-inch Round Elbow
Seven-and-a-half-inch Round Elbow
Small Grocers' Scoop
Medium Grocers' Scoop
Large Grocers' Scoop
Apple Corer
Oval Foot Bath
Oval Pudding Pan
Half-gallon Can Breast
One-gallon Can Breast
Two-gallon Can Breast
Three-gallon Can Breast
Half-pint Measure
One-pint Measure
One-quart Measure
Half-gallon Measure
One-pint Basin
Two-pint Basin
Three-pint Basin
Four-pint Pan
Six-quart Pan
Ten-quart Pan
Small Cake Pan
Medium Cake Pan
Large Cake Pan
Small Wash Basin
Large Wash Basin
Sprinkler Breast
Four-gallon Churn
Five-gallon Churn
Small Dust Pan
Large Dust Pan
Five Sizes Funnel Patterns
Oval Dinner Bucket
Rain Water Cut-off
No. 7 Boiler Cover
No. 8 Boiler Cover
No. 9 Boiler Cover
No. 7 Boiler Bottoms
No. 8 Boiler Bottoms
No. 9 Boiler Bottoms

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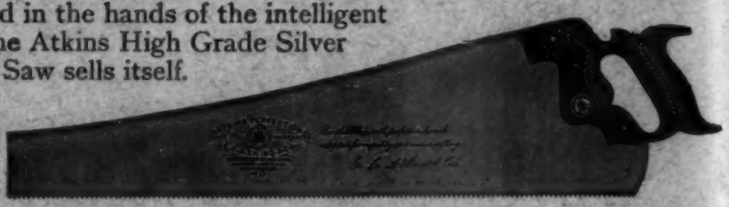

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